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EEA Grants Greece
Hellenic Republic
Ministry of Economy and Finance

HELLENIC REPUBLIC
Ministry of Economy and Finance

PROJECT TITLE

Ex Post Evaluation of the Programme "Renewable Energy, Energy Efficiency" (Programme GR - Energy)

under the European Economic Area (EEA) Financial Mechanism during the 2014–2021 Programming Period

DELIVERABLE

Evaluation Report

April 2025

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Acronyms and Abbreviations

CF	Cohesion Fund
EE	Energy Efficiency
EEA FM	European Economic Area Financial Mechanism
EU	European Union
ERDF	European Regional Development Fund
NECP	National Energy and Climate Plan
PO	Programme Operator
RES	Renewable Energy Sources
SMEs	Small and Medium-sized Enterprises

Executive Summary

The "Renewable Energy, Energy Efficiency (GR–Energy)" Programme was implemented within the framework of a Programme Agreement between the Greek Authorities and the Financial Mechanism Committee of the EEA Grants for the 2014 – 2021 programming period.

The Programme aims to contribute to "less carbon intensive energy and increased security of supply" and seeks to "enhance energy efficiency" through the short and medium term impact of its outcomes on relevant stakeholders and target groups.

The Programme had a total budget of €15,910,757 (€11,933,068 from the EEA Financial Mechanism and €3,977,689 from the Greek National Public Investment Programme). The Centre for Renewable Energy Sources and Saving (CRES) was designated as the Programme Operator.

Management costs amounted to 7.75% of the total eligible budget (€1,233,333), while an additional amount of €123,333 was allocated from the Bilateral Relations Fund (fully financed by the EEA Grants).

The Programme was designed by CRES with the participation of key institutional actors operating in the fields of Renewable Energy Sources (RES) and Energy Efficiency (EE). CRES has an institutional role and possesses substantial administrative and technical expertise in designing and managing programmes in these fields, thereby enabling optimal capitalization on results. This contributes significantly to the achievement of the objectives of Greece's National Energy and Climate Plan (NECP), which is fully aligned with the EU's energy and climate policies. The implemented projects also contribute to addressing the needs of the Regional Programmes in which the beneficiary organisations operate, in the areas of energy efficiency and Renewable Energy Sources.

A total of thirteen (13) projects were implemented across Greece under the Programme, with a total eligible budget (Public Expenditure) of €14,627,161.34. All projects were successfully completed, with the final cost estimated at €13,547,350 of which €13,181,886 were eligible public expenditures, €45,178 were non-eligible public expenditures due to the delayed implementation of a small portion of the projects outside the eligibility period, and €320,286 was private co-financing required to cover additional costs resulting from equipment price increases.

The financial completion rate of the projects ranged between 71.06% and 99.89%, while the overall programme completion rate is estimated at 90.12%.

Regarding the Programme management costs, the eligible expenditure amounted to €1,103,995.16 (subject to confirmation by the Certifying Authority).

It is noted that since the Programme closure processes are still ongoing, minor adjustments to final cost figures may occur.

Regarding the Programme's results (outcome indicators), the following outcomes have been achieved:

- Increase in employment: 26 jobs created
- Reduction of CO_2 emissions: 4,746.23 tonnes
- Monetary savings: €1,988,033.55 per year
- Energy savings: 15,467.69 MWh/year

- Increased renewable energy production: 1,543.70 MWh/year
- Beneficiaries of improved public social infrastructure: 587,887 individuals

Most projects were completed on schedule within the eligibility period and are characterised by high-quality outcomes.

The Programme's overall effectiveness is positive, having successfully met its full set of objectives while exceeding its targets on cost savings. Weighted effectiveness (based on output and financial impacts) demonstrates overachievements on cost savings and RES production and slight underperformance on the annual CO_2 emissions reduction targets (due to relatively low effectiveness of projects of the Municipalities of Orestiada and Vari–Voula–Vouliagmeni) and energy savings (due to low effectiveness of the project of the Municipality of Vari–Voula–Vouliagmeni).

The Programme's efficiency was assessed based on the financial completion rates of the implemented projects and on their effectiveness in achieving their objectives. Given the overall resource absorption, the following efficiency levels were attained:

- Increase in employment: 110,96%
- Reduction of CO_2 emissions: 111,53%
- Monetary savings: 168,03%
- Energy savings: 108,00%
- Increased renewable energy production: 125,46%
- Beneficiaries of improved public social infrastructure: 110,97%

Based on the above information, it can be concluded that the Programme demonstrates a high level of efficiency in terms of financial resource utilisation, as it effectively meets all of its objectives, while significantly overachieving the target related to monetary savings. The weighted efficiency, both in terms of output relevance and financial weight, indicates an overachievement of targets concerning monetary savings and the increase in renewable energy production.

Given the typology of the projects and their innovative and demonstrative nature, the unit costs are deemed acceptable for the majority of the projects as well as for the Programme as a whole.

Despite its limited contribution to the national climate targets, the Programme, through the demonstrative nature of the implemented projects, contributes to the promotion of innovative solutions for improving the energy efficiency of public sector buildings and facilities. This is achieved through the combined use of renewable energy sources and the implementation of publicity and dissemination activities aimed at sharing the acquired experience and best practices.

All project implementing bodies considered that the realised projects generated both direct benefits for the final beneficiaries and indirect benefits for the wider intervention areas and local communities.

From the design phase through to its completion, the Programme remained fully aligned (demonstrating complete relevance) with the development needs and priorities identified for the sectors of Energy Efficiency (EE) and Renewable Energy Sources (RES) at various levels.

The objectives of the Programme, as set out in the Programme Agreement, are considered reasonable and achievable, as they address the identified needs in the policy areas of energy efficiency and renewable energy sources, and reflect the full range of intended final outcomes. The Programme successfully met all established objectives in an effective and efficient manner, particularly in terms of financial resource utilisation.

The problems and difficulties encountered during the implementation of the Programme were mainly due to unforeseen factors and could not have been avoided. Nevertheless, they were effectively addressed due to the experience of the technical services of the project implementing bodies and the highly effective cooperation between the Programme Operator, the implementing bodies, the National Focal Point (NFP) and the Financial Mechanism Office (FMO). It is noted that an extension of the Programme implementation period could have been beneficial and could have contributed to the improvement of the final outcome.

The Programme demonstrates synergies and complementarities with interventions currently implemented or to be implemented within the framework of the National Recovery and Resilience Plan "Greece 2.0," the Environment and Climate Change Programme 2021–2027, the Just Transition Development Programme 2021-2027, as well as the Regional Development Programmes 2021–2025.

No overlaps with other development programmes have been identified due to the effective targeting applied during the Programme's design phase and the obligation imposed on potential beneficiaries to submit a declaration confirming the absence of double funding when submitting project funding requests.

All beneficiaries involved in the Programme have undertaken all necessary measures to ensure the maintenance and effective operation of their projects throughout the entire duration of their productive operational period (project lifespan varies between 10 and 17 years).

The publicity and results dissemination actions carried out both by the final beneficiaries of the projects and by the Programme Operator, in conjunction with bilateral cooperation activities, contribute to the sustained preservation of the Programme's benefits.

The Programme's management and control system operated effectively, contributing to the timely tendering and implementation of the Programme's projects.

CRES was the first Programme Operator to implement the procedure for submitting the Interim Financial Reports through GRACE (the EEA Financial Mechanism's digital platform), as well as the integration of the Programme Management work package and all intermediate stages up to the submission of the Expenditure Declaration Report in the Greek MIS (Management Information System).

The effectiveness of the support provided by the Programme Operator (CRES) was evaluated very positively—almost to the highest possible degree—by all implementing bodies of the interventions, as reflected in the responses to the Evaluation Questionnaire. However, the procedures for informing and supporting final beneficiaries during the project proposal development phase require improvement.

The support provided by the Programme Operator (CRES) was assessed as highly effective, receiving near-maximum ratings from all the beneficiaries, as reflected in the Programme's Evaluation Questionnaire. However, the information and support procedures for final beneficiaries during the funding proposal preparation phase require improvement.

Through the demonstrative actions of the thirteen (13) funded projects, the Programme delivered tangible and measurable energy, environmental, and economic benefits in the context of energy efficiency upgrades for energy-intensive public building infrastructure and facilities, utilizing a combined application of Renewable Energy Source (RES) technologies. Simultaneously, it significantly contributed to local economic development, familiarizing residents with sustainable development practices, improving quality of life, and mitigating social and economic inequalities. Furthermore, the Programme strengthened bilateral cooperation between Greece and Donor States in the field of Renewable Energy Sources and Energy Efficiency, laying the groundwork for further collaboration and development.

1 Introduction

The current document constitutes a deliverable under contract no. 25SYMV016482396/17.03.2025 between the company "VK PREMIUM – Commercial Single - Member Limited Liability Company" and the Special Service responsible for the Development, Coordination & Monitoring of the European Economic Area (EEA) Financial Mechanisms Implementation – National Focal Point (NFP). The subject of the contract is the ex-post evaluation of the Programme "Renewable Energy, Energy Efficiency" (Programme GR – Energy) of the EEA Financial Mechanism, implemented during the Programming Period 2014 – 2021, with the Centre for Renewable Energy Sources and Saving (CRES) acting as Programme Operator.

Chapter two provides a brief reference to the European Economic Area (EEA) Financial Mechanism for the Programming Period 2014 – 2021, along with a concise description of the Programme "Renewable Energy, Energy Efficiency (Programme GR – Energy)." It includes references to the Programme's Objectives, the Communication Plan, and the Management and Control System.

Chapter three presents the thirteen (13) approved projects funded under the Programme, along with a reference to the project proposals that received a negative evaluation.

Chapter four presents the evaluation of the Programme based on the following criteria / thematic areas:

- Relevance: This criterion examines and analyses the alignment of the Programme's development with the characteristics, structure, and needs of the relevant policy sector (Renewable Energy and Energy Efficiency).
- Effectiveness: This criterion examines and analyses the effectiveness of the Programme in achieving its qualitative, quantitative and financial targets.
- Efficiency: This criterion examines and analyses the sufficiency and efficiency of the used resources and their proportionality in relation to implementation progress and results achievement. The Programme's absorption capacity is assessed by comparing the amounts committed versus those allocated, as well as the amounts disbursed in comparison to those contracted.
- Coherence: This criterion examines and analyses the degree of coherence, specifically the compatibility, synergy and complementarity of the Programme and its projects with national and European policies and funding instruments.
- Sustainability: This criterion examines and analyses the sustainability of the projects and their outcomes over time.

- Impact: This criterion examines and analyses the anticipated effects—both positive and negative, direct or indirect—that the Programme and its projects may have over the long term.
- Administrative Capacity and Implementation Procedures: This criterion examines and analyses the regulatory framework, the effectiveness of the management system, the administrative capacity of the Programme Operator and the quality of management demonstrated by the other involved authorities responsible for programme management, implementation, and control.

Chapter five provides a concise summary of the key findings for each evaluation criterion / thematic area.

Chapter six, which serves as an Annex to the deliverable, includes reference material, a description of the research process conducted among the involved stakeholders, a summary of the used questionnaires, the presentation of the primary research data, and processed information (data tables).

2 European Economic Area (EEA) Financial Mechanism 2014 – 2021 | Programme "Renewable Energy, Energy Efficiency" (Programme GR – Energy)

The European Economic Area (EEA) Financial Mechanism (EEA Grants) 2014–2021 represents the contribution of Iceland, Liechtenstein, and Norway, aiming to reduce economic and social disparities and to strengthen bilateral relations with fifteen (15) European countries, including Greece.

On 31 October 2017, a Memorandum of Understanding (MoU) was signed between Greece and the Donor States, following formal negotiations that took place between November 2016 and September 2017. These negotiations were conducted between the Greek authorities and the Financial Mechanism Committee (FMC), based on the country's identified needs and priorities, for the allocation of the funding under the EEA Financial Mechanism.

The Memorandum of Understanding (MoU) includes provisions for the Bilateral Relations Fund, which aims to strengthen bilateral relations between the Donor States and Greece. This Fund is governed by a separate Agreement between the Donor States and the National Focal Point (Special Service for Development, Coordination and Monitoring of the EEA Financial Mechanisms Implementation). The National Focal Point holds overall responsibility for the implementation of the EEA Financial Mechanism's Memorandum of Understanding (MoU) in Greece, as well as for ensuring the achievement of its objectives [in accordance with Joint Ministry Decision No. 13249/04.02.2020 (Government Gazette B' 526)].

2.1 Brief Description

The Memorandum of Understanding (MoU) provided for the financing of nine (9) Programmes across an equal number of priority sectors, which included, among others, the Programme "Renewable Energy, Energy Efficiency" (Priority Area No. 5).

The Programme Agreement between the Greek Authorities and the Financial Mechanism Office of the EEA for the implementation of the Programme was signed on 26 June 2019, followed by Ministerial Decision No. 22869/2020 (Government Gazette B' 974) concerning the co-financing of the Programme with funds from the European Economic Area (EEA) Financial Mechanism 2014–2021 and national resources from the Greek Public Investment Programme (PIP).

The co-financing decision was amended by Ministerial Decisions No. 92661/2021 (Government Gazette B' 4132) and No. 82773/2023 (Government Gazette B' 5671), increasing the available budget of the Programme. This adjustment followed the approval of the amendment to the Programme Agreement on 15 May 2023 (via the "GRACE" information system).

The total budget of the "Renewable Energy and Energy Efficiency (GR-Energy)" Programme amounted to €15,910,757 [comprising €11,933,068 from the EEA Grants Financial Mechanism and €3,977,689 in national funds from the Greek Public Investment Programme (PIP)]. The management of the Programme was entrusted to the Centre for Renewable Energy Sources and Energy Saving (CRES).

The management cost of the Programme corresponded to 7.75% of the total eligible budget (€1,233,333). In addition, an allocation of a supplementary amount of €123,333 from the Bilateral Relations Fund (fully financed by the EEA Financial Mechanism) was foreseen.

2.2 Programme Objectives

The Programme "Renewable Energy, Energy Efficiency (GR – Energy)" aims to promote "lower carbon intensity energy and enhanced energy security" and seeks to achieve an "improvement in energy efficiency" through the short and medium term impact of its results on stakeholders and target groups. Specifically, the Programme's projects contribute to:

- the reduction of CO_2 emissions,
- the decrease in energy consumption,
- the increase in renewable energy production,
- the creation of new employment opportunities, and
- the strengthening of the resilience and development potential of local communities.

The target groups of the Programme are the users and visitors of the buildings and infrastructures. The Programme's projects are designed to function as demonstrative initiatives, with the objective of increasing the number of energy - efficient buildings and infrastructures across Greece.

The Programme supports the implementation of development projects in the fields of Renewable Energy Sources (RES) and Energy Efficiency (EE) in Greece, serving as a key pillar of the country's green growth strategy in line with its European and national obligations. It also aims to mitigate social and economic inequalities and to strengthen bilateral cooperation among participating states in the fields of RES and EE.

The core objectives of the Programme are:

- The promotion of nearly zero-emission buildings in the public sector through investment in local renewable energy production,

- The exchange of know-how and experience aimed at improving the energy efficiency of buildings,
- The strengthening of the local economy and the empowerment of local communities.

Among the innovative technologies implemented were photovoltaic systems utilizing net-metering technology for the generation of renewable electricity, solar collectors for hot water production, geothermal heat pumps, air-source heat pumps and fan coil units replacing petrol boilers and thus enabling the decarbonisation of heating systems. External thermal insulation was also applied to maintain optimal indoor temperatures throughout the year and to protect walls and roofs from moisture.

Moreover, LED lighting systems were installed to enhance energy efficiency and improve lighting quality. Additional interventions included the installation of solar canopies and electric vehicle charging stations in parking areas to promote e-mobility powered by green energy. Smart metering systems were also deployed to monitor building energy consumption and to support the effective utilisation of data measurements.

The aforementioned technologies enhance the energy performance of buildings, improve indoor environmental quality and significantly increase energy efficiency, leading to:

- Substantial reductions in electricity and fuel consumption,
- Long-term cost savings through lower annual operational expenditures,
- A decreased environmental footprint, supporting climate mitigation goals.

These technologies are expected to serve as exemplary models for fostering a “new culture” of sustainable development within the thirteen (13) local communities of the Programme Beneficiaries.

2.2.1 Communication Plan

Both the “GR - Energy” Programme and its projects incorporate information and publicity activities, as these constitute a formal obligation under the Regulation on the Implementation of the EEA Grants 2014 - 2021 (Article 1.7 “Visibility” of Chapter 1 and Articles 3.1 - 3.3 of Chapter 3 “Information and Communication”).

For the Programme's communication activities, a dedicated Communication Plan was prepared in September 2020, in compliance with the Regulation on the Implementation and the Communication and Design Manual of the EEA Grants 2014 - 2021.

The main objectives of the communication actiivities are:

- To provide best practices for utilizing the potential and addressing the needs of buildings for their upgrade to Nearly Zero-Energy Buildings (NZEBs), while promoting further investments in this sector through information dissemination, experience sharing, and training.
- To strengthen the cooperation among Implementing Bodies through their participation in innovative activities (events, thematic workshops, websites, conferences, etc.).
- To increase public awareness and social acceptance of the “GR-Energy” projects to foster further investments in Nearly Zero Energy Buildings.

The implemented actions focused on the following:

- Informing key target groups about project objectives, approaches, outcomes, and opportunities for participation in project activities.
- Disseminating results among local, national, and EU stakeholders from business, research, and public sectors.
- Raising awareness in local communities about benefits derived from the projects.
- Increasing public awareness regarding the "GR-Energy" programme initiatives.
- Ensuring transparency throughout project implementation.
- Guaranteeing compliance with EU regulatory requirements concerning visibility and information disclosure.
- Securing the adoption of obligations related to the Implementing Bodies (IBs) of the projects.

2.2.2 Management and Control System

The Management and Control System (MCS) establishes the general rules governing the implementation of the EEA Grants for the 2014 – 2021 programming period, in accordance with Protocol 38c of the EEA Agreement and the Regulation on the Implementation of the EEA Grants 2014 - 2021. The EEA Grants Management and Control System (MCS) is defined as the set of administrative authorities that are interdependent, organised within a specific organisational structure, and carry out individual activities aimed at the sound financial management of the EEA Grants, as well as the rules and procedures required for this purpose. Specifically, the EEA Grants MCS provides for:

- The definition of competencies for all bodies involved in management and control, including the internal allocation of functions within each entity,
- Compliance with the principle of separation of duties and responsibilities both between these bodies and within their internal structures,
- Procedures ensuring the regularity and correctness of expenditure, including reliable accounting recording systems, monitoring mechanisms and electronic financial reporting systems,
- A reporting and monitoring framework when the responsible entity delegates the execution of its assigned tasks to another legal entity of any legal form,
- Regulatory provisions for system operation controls,
- Systems and procedures guaranteeing an adequate audit trail, and
- Reporting and monitoring procedures concerning irregularities, recovery of unduly paid amounts.

The Programme's Management and Control System (MCS) was established by Joint Ministerial Decision (JMD) No. 13249/2020 (Government Gazette B' 526), subsequently amended by JMD No. 78434/2021 (Government Gazette B' 3141), and ultimately fully replaced by JMD No. 46317/2022 (Government Gazette B' 2447).

3 Projects of the "Renewable Energy and Energy Efficiency" Programme (Programme GR - Energy)

As part of the implementation of the "Renewable Energy Sources and Energy Efficiency" Programme (Programme GR - Energy), eighteen (18) proposals were submitted by an equal number of entities. Thirteen (13) projects were approved and implemented, with a total (approved) budget of €14,627,161.34, while five (5) project proposals received a negative evaluation.

Across the Programme as a whole (based on data provided by the Programme Operator and field research), a total of twenty-six (26) jobs were created, the estimated annual reduction in CO_2 emissions amounts to 4,746 tonnes, the projected cost savings resulting from improved energy efficiency in infrastructure are estimated at €1,988,034, the annual energy savings are calculated at 15,468 MWh, the annual increase in renewable energy production is estimated at 1,544 MWh, and the number of beneficiaries from the use of improved public infrastructure is estimated at 587,887 individuals.

A summary presentation of the implemented projects is provided below.

3.1 Integrated Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini (MIS Code: 5075131)

Total Approved Public Expenditure: 959.649,44 €

Project Title: Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini

Project code (MIS): 5075131

Main Beneficiary Entity: Municipality of Katerini (Organization for Education, Culture, Sports and Social Welfare)

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
882.642,08 €	0,00 €	0,00 €

Project objectives

Technical Description: Energy upgrade of the 2nd Municipal Stadium of Katerini, a very important sports facility for the area, housing the city's indoor swimming pool, the indoor basketball and handball gymnasium, as well as the shooting range. Upon completion of the interventions, the 2nd Municipal Stadium of Katerini was transformed into an Integrated, energy-efficient sports center.

Deliverables

Subproject 1: Supply and Installation of Integrated Energy Technologies at the Municipal Stadium of Katerini for its Transformation into a Modern Sports Center with Zero Energy Consumption (per building facility)

At the Indoor Basketball Gymnasium, the existing window frames were replaced with modern energy-efficient frames incorporating double-glazed units, and the conventional lighting fixtures were upgraded to LED-based luminaires.

At the Indoor Swimming Pool, a hybrid gas-powered heat pump system was installed for central air conditioning, heating, and domestic hot water (DHW) supply, and the conventional lighting fixtures were replaced with LED lamps.

At the Shooting Range, the conventional boiler was replaced with a 50 kW heat pump system equipped with fan coils, conventional lighting fixtures were replaced with LED technology luminaires, and a demonstration photovoltaic (PV) electric vehicle charging station with a capacity of 10 kWp was installed.

Subproject 2: Installation of Measurement and Monitoring Equipment for the Evaluation of Project Performance

A measurement system was installed.

Subproject 3: Organization of Workshops and Training Activities for the Dissemination of Project Results

Development of promotional materials was carried out to facilitate the dissemination of the Project's outcomes, alongside the design and maintenance of a dedicated website, production of communication collateral, organization of interactive engagement activities and a press briefing, as well as implementation of targeted information campaigns and promotional actions related to the Energy Upgrade initiative.

Subproject 4: Consulting Services for Support in the Management and Implementation of the Project

Support in the management and preparation of the Project's progress reports, monitoring the conduct of tenders and any potential appeals, overseeing the smooth progress of the project's physical scope implementation schedule, scientific recording of the energy consumption of the Indoor Gymnasium following the completion of Subproject 1, and in the administrative closure of the Project.

Subproject 5: Energy Upgrade Interventions at the Shooting Range

The conventional boiler was replaced with a 50 kW heat pump system equipped with fan coils, conventional lighting fixtures were upgraded to LED technology luminaires, the building envelope was thermally insulated with 7 cm thick extruded polystyrene panels, and a demonstration photovoltaic (PV) electric vehicle charging station with a capacity of 10 kWp was installed.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO_2 emissions is calculated at 1,264 tons, the annual energy savings are estimated at 4,180 MWh, the increase in renewable energy production is estimated at 7 MWh/year, the cost savings due to improved energy efficiency of infrastructures are estimated at €766,110 per year, the number of jobs created is 2, and finally, the beneficiaries of the improved public infrastructure are estimated at 75,000 individuals.

3.2 NZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato - Tavros (MIS Code: 5075035)

Total Approved Public Expenditure: 831.244,45 €

Project Title: NZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato - Tavros

Project code (MIS): 5075035

Main Beneficiary Entity: Municipality of Moschato - Tavros

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
741.341,68 €	0,00 €	0,00 €

Project objectives

Technical Description: Transformation of the Moschato Indoor Gymnasium into a zero-energy consumption model sports facility through the integration of renewable energy sources and energy efficiency measures, alongside the promotion of a green growth culture through exemplary dissemination and awareness-raising activities targeting the Municipality's citizens, with the objective of generating multiplicative benefits—both in terms of energy savings and environmental impact—for the local community.

Deliverables

Subproject 1: "Supply and Installation of Innovative Green Technologies for the Transformation of the Moschato Municipality Indoor Gymnasium into a Nearly Zero-Energy Building (NZEB)"

An air-to-water heat pump was installed for central air conditioning, heating, and domestic hot water supply; conventional lighting fixtures were replaced with LED technology lamps; and a demonstration photovoltaic (PV) electric vehicle charging station with a capacity of 10 kWp was installed.

Subproject 2: "Development of a Smart Metering Network for the Project's Requirements," which included the installation of a modern metering system consisting of energy meters

A measurement system was installed..

Subproject 3: "Activities (events, seminars, etc.) for the Dissemination of the Project's Results"

Distribution of printed and digital materials was carried out via a kiosk at the sports facilities of the Municipality of Moschato-Tavros, along with the development and maintenance of a website, production of communication materials, organization of interactive activities and a press conference, as well as awareness-raising campaigns about the project and promotion activities related to the Energy Upgrade

Subproject 4:

Provision of Consultancy Services for the Effective Monitoring of the Project of the Municipality of Moschato-Tavros

Support in the management and preparation of the Project's progress reports, finalization of the Publicity and Information Plan, monitoring the conduct of tenders and any related appeals, overseeing the smooth progress of the implementation schedule of the Project's physical scope, scientific recording of the energy consumption of the indoor gymnasium following the completion of Subproject 1, and support in the administrative closure of the Project.

Subproject 5: Implementation of Energy Technologies at the Indoor Gymnasium of the Municipality of Moschato

Thermal insulation was applied to the gymnasium roof, energy-efficient window frames were installed, and an automation system was implemented for monitoring and controlling the building's energy consumption.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO_2 emissions is calculated at 261 tons, the annual energy savings are estimated at 772 MWh, the increase in renewable energy production is estimated at 16 MWh/year, the cost savings due to improved energy efficiency of infrastructure are estimated at €84,924 per year, the number of jobs created is 2, and finally, the beneficiaries of the improved public infrastructure are estimated at 141,456 individuals.

3.3 Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station (MIS Code: 5074958)

Total Approved Public Expenditure: 1.266.239,15 €

Project Title: Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station

Project code (MIS): 5074958

Main Beneficiary Entity: The School of Fine Arts

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
912.869,58 €	0,00 €	0,00 €

Project objectives

Technical Description: Energy interventions at the Artistic Station of Delphi, which is possibly the most frequently visited artistic facility of the School, due to both its high level of activity and its location on the outskirts of the Delphi archaeological site

The project includes building-scale energy efficiency interventions and the integration of renewable energy systems at the Artistic Station of Delphi, the implementation of innovative experiential workshop activities, the installation of a smart metering system, and the provision of support services.

Deliverables

Supply and Installation of Smart and Innovative Energy Upgrade Interventions in an Infrastructure of the School of Fine Arts (ASFA)"

Thermal insulation was installed on the external masonry and roof surfaces of the building envelope. Variable Refrigerant Volume (VRV) air conditioning units were deployed for the cooling and heating of interior spaces. The existing window frames were replaced with new double-glazed energy-efficient units. Solar thermal collectors were installed for the production of domestic hot water (DHW), and conventional lighting fixtures were replaced with LED technology luminaires.

Subproject 2:"Smart Experiential Monitoring Equipment in an Infrastructure of the School of Fine Arts (ASFA)"

Environmental parameter sensors (temperature, humidity, solar radiation intensity, etc.) and building energy metering devices were installed. A weather station and visual display units were also deployed, enabling real-time monitoring of energy consumption data. The recorded measurements are utilized both for consumption analysis and as part of the experiential learning activities within the on-site educational laboratory.

Subproject 3: Operation of the ASFA Model Living Lab for the Dissemination of the ASFA Project

An experiential and interactive website was developed, alongside the establishment of a Hands-on Environmental Awareness Laboratory. Promotional materials related to the laboratory were utilized, and an information network was created to facilitate knowledge exchange with similar projects. Extensive outreach and real-time engagement activities (workshops, online campaigns, etc.) were conducted to raise public and internet users' awareness and sensitivity

Subproject 4: Scientific Support Services for the Seamless Implementation of the ASFA Project

Provision of support services for the conduction and completion of the project's tendering procedures, as well as for the seamless monitoring, implementation, and finalization of the project, including recommendations to ensure the efficient operation of the project and the capitalization of its results.

Subproject 5:Supply and Installation of a Modern Energy Consumption Monitoring and Automation System

The installation of a modern Building Energy Management System (BEMS) and a ventilation system with heat recovery was carried out.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO2 emissions is calculated at 330 tons, the annual energy savings are estimated at 1,141 MWh, the cost savings due to improved energy efficiency of infrastructure are estimated at €125,569 per year, two jobs were created, and the number of beneficiaries from the use of the improved public infrastructure is estimated at 45,000 individuals.

3.4 Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece (MIS Code: 5075132)

Total Approved Public Expenditure: 749.593,78 €

Project Title: Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece

Project code (MIS): 5075132

Main Beneficiary Entity: Municipality of East Samos

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
694.969,24 €	22.584,28 €	0,00 €

Project objectives

Technical Description: Energy interventions in three buildings—the Nursery in Ano Vathy, the Primary School of the Mytilinies community, and the Cultural Center—with the objective of transforming them into nearly zero-energy buildings, achieving energy performance class B+.

Deliverables

Subproject 1: Supply and Installation of Advanced Technologies for the Energy Upgrade of important Buildings in Samos

At the Nursery in Ano Vathy, window frames were replaced, conventional lighting fixtures were substituted with LED technology fixtures, an internal thermal insulation system and a Building Energy Management System (BEMS) for energy consumption monitoring were installed, along with modern HVAC units for cooling and heating.

At the Mytilinies Community School, the existing oil-fired boiler was replaced with a heat pump and HVAC units, internal thermal insulation was installed, and a Building Energy Management System (BEMS) was implemented

In the Historic Area of Pythagoreio, a total of 35 conventional street lighting fixtures were replaced with modern LED technology fixtures.

Smart E-Mobility: Design and installation of two solar-powered charging stations (utilizing renewable energy sources), one located in Vathy and one in Pythagoreio.

Subproject 2: Installation of Smart Metering Devices for Monitoring the Project's Outcomes

Installation of Smart Metering Devices for Monitoring the Project's Outcomes

Subproject 3: Positive Open Energy Lab for Innovation Promotion

Subproject 4: Consulting Services for the Management, Implementation, and Finalization of the Project

Support in conducting procurement procedures for the remaining sub-projects of the Action, ensuring smooth monitoring of sub-project progress, facilitating the successful implementation and completion of the Action, and preparing a plan for capitalizing on the results of the Action

Subproject 5: Energy Upgrade of the Mytilineia Cultural Center

he conventional lighting fixtures were replaced with LED technology fixtures, and the existing oil-fired boiler was substituted with a heat pump system equipped with fan coils

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO2 emissions is calculated at 82 tons, with an annual energy savings estimated at 714 MWh. The cost savings due to improved energy efficiency of the infrastructure are estimated at €78,600 per year. One job position is expected to be created, and the number of beneficiaries from the use of the upgraded public facilities is estimated at 13,500 individuals.

3.5 Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens (MIS Code: 5073760)

Total Approved Public Expenditure: 1.044.349,31 €

Project Title: Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens

Project code (MIS): 5073760

Main Beneficiary Entity: Agricultural University of Athens

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.002.568,30 €	8.360,28 €	0,00 €

Project objectives

Technical Description: Energy interventions at the facilities of the Agricultural University of Athens aimed at reducing its carbon footprint and raising awareness among students, staff, and visitors about modern Renewable Energy Sources (RES) and Building Energy Efficiency (BEE) technologies.

Within this framework, energy efficiency upgrades were implemented in the building infrastructure, specifically targeting the Roussopoulos and Library buildings, with the objective of transforming them into high-performance energy-efficient buildings.

Deliverables

Subproject 1: "Supply and Installation of a Lighting Network at the Agricultural University of Athens Facilities for Electrical Energy Savings"

The conventional lighting fixtures were replaced with new LED technology fixtures in the Roussopoulos building and the Library building.

Subproject 2: "Supply and Installation of Innovative Energy Technologies for Energy Savings

The heating system in the Roussopoulos building was replaced with modern heating and cooling systems..

Subproject 3: "Monitoring and Reporting of Project Results through an Integrated Measurement System

A measurement system was installed.

Subproject 4: "Innovative Experiential Workshop Activities on Sustainable Energy Based on the Project's Outcomes"

Publicity activities and workshops were conducted, printed and promotional materials were produced and distributed, a dedicated interactive website was developed, press releases were issued, and a project information sign was installed..

Subproject 5: "Consulting Support Services for the Agricultural University of Athens (AUA) in the Implementation and Management of the Project

Support in the management and monitoring of the project's subprojects, as well as in the development and implementation of a methodology for the scientific monitoring of Subprojects 1–4

Subproject 6: "Supply and Installation of a Local Microgrid at the Facilities of the Agricultural University of Athens for Electricity Generation and Storage"

The installation of a Building Energy Management System (BEMS) was completed at the Library building. Two solar-powered parking stations with electric vehicle (EV) charging capabilities were created, accommodating a total of 10 parking spots (5 + 5), with an aggregate capacity of 10 kWp (5 + 5 kWp). Additionally, photovoltaic (PV) panels with net metering capability and a total capacity of 10 kWp were installed. Supply of one electric passenger vehicle was also carried out..

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction in CO2 emissions is calculated at 310 tonnes, the annual energy savings are estimated at 1,049 MWh, the increase in renewable energy production is estimated at 65 MWh/year, the cost savings due to improved energy efficiency of infrastructure are estimated at €115,387 per year, two jobs have been created, and finally, the beneficiaries of the improved public infrastructure are estimated at 105,466 individuals.

3.6 Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece (MIS Code: 5074843)

Total Approved Public Expenditure: 968.458,23 €

Project Title: Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece

Project code (MIS): 5074843

Main Beneficiary Entity: Municipality of Farsala

Public Expenditure

Eigible Public Expenditure	Ineligible Public Expenditure	Private Contribution
688.161,79 €	0,00 €	0,00 €

Project objectives

Technical Description: Energy interventions at the Cultural Center building of the Municipality of Farsala aiming at upgrading the building to energy class B+ and, simultaneously, the creation of a model environmental education park in the building's courtyard.

The Cultural Center of the Municipality of Farsala is the primary cultural infrastructure of the area, hosting numerous facilities where daily cultural activities, events, classes, and guided tours take place, promoting the spirit, arts, letters, and cultural heritage of the Municipality. The implementation of the project contributes to the sustainability of the infrastructure and raises awareness among local residents about modern technologies and sustainable development practices

Deliverables

Subproject 1: Energy Upgrade of the Cultural Center of Farsala

Replacement of existing window frames with modern energy-efficient frames, installation of insulation on the roof and exterior building envelope, substitution of conventional lighting fixtures with LED lamps, implementation of a Building Energy Management System (BEMS), and installation of a photovoltaic system with a nominal capacity of 20 kWp

Subproject 2: "Supply and Installation of Metering Equipment at the Cultural Center"

A measurement system was installed.

Subproject 3 : Exemplary Actions for the Dissemination of the Project Results in Central Greece

Events were organized, the project website was developed, promotional gifts and printed materials were distributed, press releases were published, and the project's information sign was installed

Subproject 4 : Provision of Services for the Monitoring of Project Implementation and the Verification of Project Outcomes

Support in conducting procurement processes, continuous assistance for the smooth monitoring of the remaining project subprojects, and facilitation of the seamless implementation and completion of the Project.

Subproject 5: «Supporting Energy Upgrade Actions for the Cultural Center of the Municipality of Farsala in the Outdoor Premises»

Installation of solar canopy structures with a nominal capacity of 10 kWp, deployment of demonstrative renewable energy systems for educational purposes, installation of autonomous outdoor lighting fixtures, and integration of an electric vehicle charging station powered by the photovoltaic installation

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO2 emissions is calculated at 82 tons, the annual energy savings are estimated at 854 MWh, the increase in renewable energy production is estimated at 257 MWh/year, the cost savings due to improved energy efficiency of the facilities are estimated at €93,969 per year, 2 jobs are created, and finally, the beneficiaries from the use of the improved public facilities are estimated at 116,325 individuals.

3.7 Integration of Innovative Energy Technologies in Central Building Infrastructure of High accessibility of AUTh (MIS Code: 5075027)

Total Approved Public Expenditure: 1.078.229,25 €

Project Title: Integration of Innovative Energy Technologies in Central Building Infrastructure of High accessibility of AUTh

Project code (MIS): 5075027

Main Beneficiary Entity: Aristotle University of Thessaloniki (AUTH)

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.043.993,86 €	0,00 €	0,00 €

Project objectives

Technical Description:

Energy Upgrades to the Building Infrastructure of the School of Science at Aristotle University of Thessaloniki (AUTH), Aiming at Its Transition from Energy Class D to B+ and Its Transformation into a Model Energy-Efficient Building. The energy interventions were accompanied by the installation of an intelligent system for monitoring energy consumption and environmental parameters.

In parallel with the building interventions at the Aristotle University of Thessaloniki (AUTH), the Action included the provision of scientific support services by specialized personnel, as well as publicity and dissemination activities, with particular emphasis on the educational dimension.

Deliverables:

Subproject 1 : «Supply and Installation of RES–EEM Interventions in a Building Facility of the Aristotle University of Thessaloniki (AUTH)»

Installation of a heat pump system for centralized HVAC (Heating, Ventilation, and Air Conditioning)

Subproject 2 : « Installation of Smart Meters and Sensors in Support of the Implementation of the Action's Objectives»

Installation of Metering Equipment and Sensors.

Subproject 3 : «Implementation of Educational and Communication Activities Informed by the Outcomes of the Project»

A publicity and awareness-raising plan has been finalized, dissemination activities have been implemented, design and operation of a Living Lab (demonstrative/testing environment) and development of educational material have been carried out, An educational guide on energy savings in buildings has been developed, publicity, networking, and training workshops have been organized.

Subproject 4 : «Scientific Support Services for the Monitoring and Completion of the Action»

Provision of specialized services and support to the Aristotle University of Thessaloniki (AUTH) in the conduct of procurement procedures, the management of the Action, the monitoring of the implementation progress of the interventions, the certification of energy performance results, and the smooth completion of the Action.

Subproject 5: «Implementation of energy-saving technologies in lighting systems»

Conventional lighting fixtures were replaced with LED technology lamps, including all necessary actions to ensure their proper installation. A thermal insulation system was applied to the roof of the School of Science building, and a demonstrative electric vehicle charging station powered by photovoltaic (PV) panels with a capacity of 5kWp was installed.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO2 emissions is calculated at 254,06 tons, the annual energy savings are estimated at 830,98 MWh, the increase in renewable energy production is estimated at 7,30 MWh/year, the cost savings due to improved energy efficiency of the facilities are estimated at €91.407,80 per year, 2 jobs are created, and finally, the beneficiaries from the use of the improved public facilities are estimated at 49.980 individuals.

3.8 Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros (MIS Code: 5074832)

Total Approved Public Expenditure: 1.237.027,83 €

Project Title: Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros

Project code (MIS): 5074832

Main Beneficiary Entity: Municipality of Skyros

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.235.611,66 €	0,00 €	0,00 €

Project objectives

Technical Description:

Demonstrative implementation of innovative technological solutions in key areas of the Municipality of Skyros, aimed at the upgrading and integrated management of local energy infrastructure. Specifically, the interventions concern: the Wastewater Treatment Plant (WWTP) of the Municipality, the main road connecting the Port to the Town of Skyros, the building of the Municipal Slaughterhouse, the Skyros Primary School, as well as the procurement of electric vehicles, accompanied by the installation of appropriate charging stations, for the purpose of covering the operational needs of the Municipality.

Deliverables

Subproject 1: «Supply and Installation of Innovative Renewable Energy Interventions and Energy Efficiency Improvements in Buildings and Facilities of the Municipality of Skyros»

At the Municipality's Wastewater Treatment Plant (WWTP), a 20kW photovoltaic station employing Net Metering technology was installed, featuring an energy storage system with batteries (an innovative element), a battery protection system utilizing RES and hydrogen, and an electric vehicle charging station. In addition, perimeter lighting fixtures at the WWTP were replaced with LED technology.

Along the main road connecting the Port to Chora, 245 interconnected conventional lighting fixtures were replaced with LED fixtures, and 20 autonomous LED lighting units were installed. At the Municipal Slaughterhouse building of the Municipality of Skyros, a 60kW photovoltaic station was installed using the method of virtual net metering (Virtual Net Metering).

At the Primary School of Skyros, heat pumps were installed to provide heating for the school, and existing lamps and luminaires were replaced with new LED lighting fixtures.

In order to address its operational requirements, the Municipality acquired two electric vehicles and one electric two-wheeler, and proceeded with the installation of an electric vehicle charging station at the municipal waste collection facility.

Subproject 2: «Supply of **metering equipment**»

Metering equipment has been installed for the monitoring and evaluation of the Action

Subproject 3: «Provision of Specialized Scientific Advisory Services to Support the Implementation of Interventions»

Support in conducting procurement processes, continuous assistance for the smooth monitoring of the remaining project subprojects, and facilitation of the seamless implementation and completion of the Project.

Subproject 4: «Provision of Specialized Services for the Dissemination and Diffusion of the Action's Results»

Events were organized, the Project website was developed, printed materials were distributed, press releases were published, and a project information sign was installed.

Subproject 5: « Supply and Installation of Innovative Renewable Energy Auxiliary Interventions and Energy Efficiency Improvements in Buildings and Facilities of the Municipality of Skyros»

A heat pump was installed for the heating of the Skyros Primary School, and existing lighting fixtures and bulbs were replaced with new LED lighting systems

To meet the operational requirements of the Municipality, the supply of two electric vehicles and one electric motorcycle, along with two accompanying charging stations, has been carried out.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction in CO_2 emissions is 701 tonnes. Annual energy savings are projected at 717 MWh, while renewable energy production is expected to increase by 111 MWh per year. The resulting cost savings from enhanced energy efficiency of public infrastructure are estimated at €113,242.00 annually. One new job is anticipated to be created, and the number of beneficiaries of the upgraded public facilities is estimated at 3,006 individuals.

3.9 Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama (MIS Code: 5074878)

Total Approved Public Expenditure: 1.295.770,69 €

Project Title: Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama

Project code (MIS): 5074878

Main Beneficiary Entity: Municipal Water and Sewerage Company of Drama (DEYA Drama)

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.291.274,01 €	0,00 €	0,00 €

Project objectives

Technical Description:

Targeted energy interventions in sectors with significant contribution to the Municipality's overall energy balance, as identified in the Sustainable Energy Action Plan (SEAP) of the Municipality of Drama.

Deliverables

Subproject 1: « Supply and Installation of Renewable and Alternative Energy Technologies in Social Infrastructure Facilities of the Municipal Water and Sewerage Company of Drama (DEYA Drama)»

At the Municipal Wastewater Treatment Plant (WWTP) a Renewable Energy microgrid and alternative energy technologies were developed. Specifically, an energy-saving system for the treatment plant was installed, along with a standalone 100 kW photovoltaic station, LED perimeter lighting for the WWTP, and LED lighting for pumping stations and water tanks. Furthermore, a hydrogen uninterrupted power supply system was procured and installed, and the supply of two electric vehicles and seven electric bicycles with corresponding charging stations was completed.

Subproject 2: « Supply of metering equipment»

The procurement and installation of metering equipment has been carried out.

Subproject 3: «Provision of Specialized Scientific Advisory Services to Support the Implementation of Interventions»

Support in conducting procurement processes, continuous assistance for the smooth monitoring of the remaining project subprojects, and facilitation of the seamless implementation and completion of the Project.

Subproject 4: « Provision of Specialized Services for the Dissemination and Diffusion of the Action's Results»

Events were organized, the Project website was developed, printed materials were distributed, press releases were published, and a project information sign was installed.

Subproject 5: Procurement and Installation of Auxiliary Equipment for Renewable and Alternative Energy Technologies at DEYA Drama's Social Infrastructure

The project includes the procurement and installation of a Green Hydrogen production unit, comprising an electrolyser system with a compressor, as well as all supplementary auxiliary subsystems (including a Water Deionisation Unit, a complete automation control panel, etc.). In addition, twelve autonomous lighting units were procured and installed to meet the lighting needs of DEYA, along with a multifunctional column designed to support and monitor the utility's operations.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO_2 emissions amounts to 303 tonnes. Annual energy savings are projected at 751 MWh, while the increase in renewable energy production is estimated at 161 MWh per year. The anticipated annual cost savings due to improved energy efficiency of public infrastructure are calculated at €45,602.00. One new job position is expected to be created, and the number of beneficiaries from the upgraded public infrastructure is estimated at 3,300 individuals.

3.10 Demonstration energy renovation projects of municipal buildings of North Evros (MIS Code: 5074952)

Total Approved Public Expenditure: 1.300.000,00 €

Project Title: Demonstration energy renovation projects of municipal buildings of North Evros

Project code (MIS): 5074952

Main Beneficiary Entity: Municipality of Orestiada

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.101.851,49 €	14.233,47 €	0,00 €

Project objectives

Technical Description:

Implementation of interventions to improve energy efficiency and integrate renewable energy systems, aiming at a major energy upgrade of four (4) municipal buildings: the former Primary School of Kastanees and the Special Primary School of Thourio in the Municipality of Orestiada, the 1st Municipal Nursery School in the Municipality of Didymoteicho, and the Minority Primary School of Megalo Dereio in the Municipality of Soufli.

Deliverables

Subproject 1: Energy efficiency upgrade interventions and installation of monitoring and measurement equipment in municipal buildings of Orestiada

Installation of thermal insulation on the building envelope, new synthetic window frames, LED lighting, air-cooled heat pumps, a distribution network with fan coil units (FCUs), a Building Management System (BMS), and metering equipment.

Subproject 2: Energy efficiency upgrade interventions and installation of monitoring and measurement equipment in municipal buildings of Didymoteicho

Installation of thermal insulation on the building envelope, new synthetic window frames, LED lighting, air-cooled heat pumps for space heating and domestic hot water (DHW), a Building Management System (BMS), and metering equipment.

Subproject 3: Energy upgrade interventions and installation of monitoring and measurement equipment in municipal buildings of the Municipality of Soufli

Installation of thermal insulation on the building envelope, new synthetic window frames, LED lighting, air-cooled heat pumps, distribution network with fan coil units (FCUs), Building Management System (BMS), metering equipment, and a photovoltaic net-metering station.

Subproject. 4: Dissemination, Networking and Publicity Actions of the Action

Events were organized, the Project website was developed, printed materials were distributed, press releases were published, and a project information sign was installed.

Subproject 5: Technical Consultant of the Action

Submission of implementation studies, tender documents, Health and Safety Plan and File (HSP–HSF), technical guidelines, and technical reports before and after the interventions for the municipal buildings of Orestiada, Didymoteicho, and Soufli, as well as Energy Performance Certificates (EPCs) upon completion of the interventions.

Subproject. 6: Complementary Energy Upgrade Interventions for Municipal Buildings in Northern Evros

Supply and installation of autonomous mechanical ventilation systems, photovoltaic (PV) net-metering systems with storage, and power-to-heat systems in the buildings included in the Action.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction in CO_2 emissions amounts to 155.70 tonnes. Annual energy savings are projected at 708.66 MWh, while renewable energy production is expected to increase by 146 MWh per year. The estimated annual cost savings resulting from improved energy efficiency in public infrastructure amount to €67,000.00. Two new jobs are anticipated to be created, and the number of beneficiaries of the enhanced public facilities is estimated at 6,854 individuals.

3.11 Energy Upgrade of Perigialis school buildings of the Municipality of Kavala (MIS Code: 5073838)

Total Approved Public Expenditure: 1.299.638,22 €

Project Title: Energy Upgrade of Perigialis school buildings of the Municipality of Kavala
Project code (MIS): 5073838

Main Beneficiary Entity: Municipality of Kavala

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.102.658,85 €	0,00 €	161.069,06 €

Project objectives

Technical Description:

Energy Upgrade of the Largest School Complex in the Kavala Prefecture, situated in the Perigiali neighborhood, east of the city of Kavala. The building complex comprises the following educational institutions: 1st Vocational High School (EPAL) of Kavala, 2nd Evening Vocational High School (EPAL) of Kavala, Evening Gymnasium of Kavala, Kavala Laboratory Center, Vocational Training Institute (DIEK) of Kavala

Deliverables

Subproject 1: Energy Efficiency Upgrade Interventions at the Perigiali School Complex of the Municipality of Kavala

Energy upgrade interventions (installation of photovoltaic systems, geothermal heat pumps and air-cooled heat pumps, replacing the use of heating oil / thermal insulation of the building envelope), and installation of monitoring and measurement equipment

Subproject 2: Provision of Communication and Publicity Services for the Action.

Publicity Actions including a detailed publicity plan for the Action of the Implementing Body, in compliance with the rules of the Programme, a model web platform incorporating the communication identity (including slogan design), informative material, press releases, and social media posts.

Training Actions including the development of educational guides.

Networking Actions involving the organisation of online workshops with the participation of all stakeholders of the Action, focusing on the presentation of the results of the Action

Subproject 3: Provision of ex post Energy Performance Certificate (EPC) issuance services for the Perigiali School Complex of the Municipality of Kavala

Issuance of an Energy Performance Certificate (EPC)

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction in CO_2 emissions is 645.40 tonnes. Annual energy savings are projected at 2,705 MWh, while renewable energy production is expected to increase by 456 MWh per year. The estimated annual cost savings resulting from improved energy efficiency in public infrastructure amount to €297,555.00. One new job is expected to be created, and the number of beneficiaries from the upgraded public facilities is estimated at 15,000 individuals.

3.12 Energy upgrades and RES installation at public buildings of Vari - Voula - Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism (MIS Code: 5075038)

Total Approved Public Expenditure: 1.296.961,00 €

Project Title: Energy upgrades and RES installation at public buildings of Vari - Voula - Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism

Project code (MIS): 5075038

Main Beneficiary Entity: Municipality of Vari Voula Vouliagmeni

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.193.247,18 €	0,00 €	159.216,74 €

Project objectives

Technical Description:

Improvement of energy efficiency and installation of Renewable Energy Sources (RES) in seven (7) municipal buildings of the Municipality of Vari–Voula–Vouliagmeni (VVV). Specifically, the intervention concerns the following buildings: 1) Municipal Technical Services Building of VVV, 2) 2nd Kindergarten of Vari, 3) 1st Primary School of Vari, 4) 1st Lower Secondary School (Gymnasium) of Vari, 5) Upper Secondary School (Lyceum) of Vari, 6) Municipal Social Services Building of VVV, 7) State Nursery School of Voula.

Deliverables

Sub-project 1: Construction of roof slab insulation

Installation of thermal insulation systems on two school buildings in the Municipality of BBB – (1st Gymnasium and Lyceum of Voula).

Sub-project 2: Supply of heat pumps, lighting fixtures and lighting systems, renewable energy technologies, and measurement and monitoring equipment.

Replacement of heating systems with more efficient heat pump systems in six municipal buildings (2nd Kindergarten of Vari, 1st Primary School of Vari, 1st Gymnasium of Vari, Vari Lyceum, Municipal Social Services Building of BBB Municipality, and State Nursery of Voula). Installation of solar thermal collectors for domestic hot water production at the State Nursery. Replacement of lighting fixtures and lamps with new high-efficiency lighting integrated with lighting automation systems. Installation of photovoltaic systems on all buildings, connected via virtual net metering. Deployment of energy measurement and monitoring equipment in all buildings, with a semi-centralized system installed in the Municipal Social Services Building of BBB Municipality..

Sub-project 3: Provision of consultancy services for the implementation of communication activities

Events were organized, the Project website was developed, printed materials were distributed, press releases were published, and a project information sign was installed.

Sub-project 4: Consultancy services for the implementation of the project

Support in conducting procurement processes, continuous assistance for the smooth monitoring of the remaining project subprojects, and facilitation of the seamless implementation and completion of the Project.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction of CO2 emissions is calculated at 319.17 tons, the annual energy savings are estimated at 937.45 MWh, the increase in renewable energy production is estimated at 286 MWh/year, the cost savings due to improved energy efficiency of infrastructure are estimated at €96,831.35 per year, 4 jobs are created, and finally, the beneficiaries of the improved public infrastructure are estimated at 6,550 people.

3.13 Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri (MIS Code: 5074776)

Total Approved Public Expenditure: 1.299.999,99 €

Project Title: Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri

Project code (MIS): 5074776

Main Beneficiary Entity: Municipality of Agii Anargiri - Kamaterou

Public Expenditure

Eligible Public Expenditure	Ineligible Public Expenditure	Private Contribution
1.290.695,93 €	0,00 €	0,00 €

Project objectives

Technical Description:

Energy Upgrade of three municipal buildings of the Municipality of Agii Anargyri (1st Gymnasium – 1st General Lyceum of Kamatero, 7th Primary School of Kamatero, and 8th Primary School of Agii Anargyri) through the implementation of Energy Efficiency Improvement Measures and local electricity generation from Renewable Energy Sources (RES).

Deliverables

Sub-project 1: RES Projects and Energy Efficiency Upgrades in Municipal Buildings of the Municipal Unit of Agii Anargyri (1st Gymnasium – 1st General Lyceum of Kamatero, 7th Primary School of Kamatero, 8th Primary School of Agii Anargyri)

The building was upgraded through the installation of external thermal insulation, LED lighting, heat pumps, a Building Energy Management System (BEMS), and photovoltaic (PV) systems

Sub-project 2: Communication and Dissemination Actions

Elaboration of a comprehensive communication plan, creation of a pilot digital platform, implementation of training and networking actions, and organization of virtual seminars.

Sub-project 3: Provision of Expert Support Services for the Effective Implementation of the Project

Provision of specialized support services pre- and post-contractual commitment, for the achievement of the Project's targets, capitalization of its outcomes, and knowledge exchange with Donor States.

Benefits (Contribution to Outcome Indicators)

The estimated annual reduction in CO_2 emissions is 38.90 tons, the annual energy savings are estimated at 107.60 MWh, the increase in renewable energy production is estimated at 32 MWh/year, the cost savings resulting from improved energy efficiency of the infrastructure are estimated at €11,836.00 per year, 4 jobs are expected to be created, and the number of beneficiaries from the use of the upgraded public infrastructure is estimated at 6,450 individuals.

3.14 Proposals with Negative Evaluation

Of the submitted project financing proposals, five (5) received a negative evaluation during Stages A and B of the assessment process:

3.14.1 Energy Upgrade of the Indoor Gymnasium of Lefkovrysi, Municipality of Kozani (MIS Code: 5072607)

The proposal submitted by the Municipality of Kozani received a negative evaluation during Stage A of the assessment process. More specifically, it received a negative assessment against the following criteria:

- Criterion A.5: The Cooperation Agreement for the implementation of the proposed action (Annex A.4 of the call for proposals), which was required, was not submitted.

- Criterion B.2: A negative opinion was issued based on the relevant checklists during the assessment of the eligibility of the Action's partner, in accordance with the provisions of Article 7.2 of the Management and Control System and any restrictions set out in the programme agreement
- Criterion B.6: It was found that multiple applications had been submitted under the same Call either by the same Implementing Body or by a single Partner of the Action Proposal

3.14.2 Pilot Energy-Positive Building: The Case of the Agricultural and Veterinary Center as a Living Lab in Western Macedonia (MIS Code: 5074749)

The proposal submitted by the Region of Western Macedonia received a negative evaluation during Stage A of the assessment process. More specifically, it received a negative assessment against the following criteria:

- Criterion A.3: Deficiencies were identified in the required documents submitted as part of the Action Proposal dossier (paragraph 2.2 of the submission guidelines).
- Criterion A.5: The Cooperation Agreement for the implementation of the proposed action (Annex A.4 of the call for proposals), which was required, was not submitted.
- Criterion A.6: The Capacity Documentation Documents of the Implementing Body/Partnership Scheme were not submitted.
- Criterion B.2: A negative opinion was issued based on the relevant checklists during the assessment of the eligibility of the Action's partner, in accordance with the provisions of Article 7.2 of the Management and Control System and any restrictions set out in the programme agreement
- Criterion B.4: The proposed budget exceeded the permissible limits set out in the Call for Proposals and
- Criterion B.6: It was found that multiple applications had been submitted under the same Call either by the same Implementing Body or by a single Partner of the Action Proposal

3.14.3 Integration of Renewable Energy Technologies and Energy Efficiency Interventions in the Buildings of the Evripos Complex of the National and Kapodistrian University of Athens in Psachna, Evia (MIS Code: 5074771)

The proposal submitted by the Special Account for Research Funds (ELKE) of the University of Athens received a negative assessment during Stage B of the evaluation process, as it scored below the threshold in four (4) criteria, specifically receiving a score of less than 5 in the following:

- Criterion A.2: "The Proposed Technical Data Sheet of the Action has been submitted in accordance with the rules of the Call and the instructions for electronic submission (ANNEXES A.1 and A.2)."
- Criterion A.6: The Capacity Documentation Documents of the Implementing Body/Partnership Scheme were not submitted.

and a score of less than 10 in the following criteria:

- Criterion A.3: Deficiencies were identified in the required documents submitted as part of the Action Proposal dossier (paragraph 2.2 of the submission guidelines).
- Criterion A.4: "Technical Data Sheet of the Action (ANNEX A.3)

3.14.4 Holistic Energy Renovation of the Student Residences of Hellenic Mediterranean University (MIS Code: 5074811)

The proposal submitted by the Hellenic Mediterranean University received a negative assessment during Stage A of the evaluation process. More specifically, it was rated unfavourably under the following criteria:

- Criterion A.3: Deficiencies were identified in the required documents submitted as part of the Action Proposal dossier (paragraph 2.2 of the submission guidelines).
- Criterion A.6: The Capacity Documentation Documents of the Implementing Body/Partnership Scheme were not submitted.
- Criterion A.10: The Solemn Declaration by the Legal Representative of the Implementing Body, confirming compliance with national and EU regulations, was not submitted
- Criterion A.11: The Solemn Declaration by the Legal Representative of the Implementing Body, stating that any costs related to additional structural reinforcement of the buildings to be upgraded will be borne by the Implementing Body and/or its partners, was not submitted,
- Criterion A.12: The Solemn Declaration by the Legal Representative of the Implementing Body was not submitted, confirming that, upon notification by the Programme Administrator (CRES), all required approvals and permits for the implementation of the Action, as well as the necessary tender documents, will be submitted within three (3) months
- Criterion A.14: The Certification by the prospective Implementing Body, confirming that the Action Proposal does not include investment components in infrastructure or productive investments that ceased operations or were relocated outside the program area within five (5) years of the final payment to the beneficiary, was not submitted and
- Criterion B.3: The Action Proposal was deemed ineligible by the Programme

3.14.5 Standard Energy Upgrade of the 1st Primary School of Messini into a Zero Carbon Footprint Building (nZEB) – (MIS Code: 5074829)

The proposal submitted by the Municipality of Messini received a negative evaluation during Stage A of the assessment process. More specifically, it received a negative assessment against the following criteria:

Criterion B.2: A negative opinion was issued based on the relevant checklists during the assessment of the eligibility of the Action's partner, in accordance with the provisions of Article 7.2 of the Management and Control System and any restrictions set out in the programme agreement

4 Ex-post Evaluation of the Programme "Renewable Energy Sources, Energy Efficiency" (Programme GR – Energy)

4.1 Relevance

The relevance of the programme development is examined and analysed in relation to the characteristics, structure and needs of the corresponding policy sector (Renewable Energy Sources and Energy Efficiency).

4.1.1 Assessment of the Relevance of the Programme Strategy in Addressing Public Sector Needs within Specific Areas of Intervention

4.1.1.1 Question A.1: To what extent was the Programme well-designed?

The "GR-Energy" Programme supports the implementation of innovative approaches to enhance the use of Renewable Energy Sources and to improve Energy Efficiency in social public infrastructures.

During the Programme Preparation Phase (01.11.2017 – 30.06.2018), CRES, as Programme Operator, closely collaborated with officials from the National Focal Point (NFP) at the Ministry of Development and Investments, as well as with the Financial Mechanism Office (FMO), for the organisation of the Stakeholder Consultation Workshop. The event included the participation of institutions and organisations of institutional significance operating in the fields of Renewable Energy Sources (RES) and Energy Efficiency. The list of participating stakeholders is provided in Annex 6.1.1.

A dedicated information workshop was held on 1 February 2018 with the active participation of all key stakeholders in the Greek Renewable Energy Sources (RES) and Energy Efficiency market. The outcomes of the stakeholder consultation were utilised in the preparation of a Concept Note, which served as the basis for defining the Programme's content. This Concept Note was initially submitted to the Financial Mechanism Office (FMO) on 1 March 2018. Under the guidance of the FMO, CRES proceeded with the necessary revisions of the Concept Note and submitted its final version to the EEA Grants on 11 July 2018

Subsequently, in the context of the preparation of the Programme Agreement for the "GR-Energy" Programme, supplementary information was provided to the Financial Mechanism Office regarding the Programme's management structure. The Programme Agreement between the EEA Grants and the Ministry of Economy and Development was signed on 6 June 2019

In general, it is assessed that the active participation of stakeholders in the Greek Renewable Energy Sources (RES) market, as well as the involvement of the competent institutional bodies, contributed positively to identifying critical parameters concerning the objectives and the procedures for the design and implementation of the Programme, the specification of the proposal evaluation criteria, and the project implementation monitoring system.

4.1.1.2 Question A.2 To what extent were the stakeholders involved appropriate and relevant, given the institutional framework and the designated responsibilities within the respective policy area?

The Centre for Renewable Energy Sources and Saving (CRES) is the national entity for Renewable Energy Sources (RES), Rational Use of Energy (RUE), and Energy Efficiency (EE), operating under the supervision of the competent Ministry of Environment and Energy (MEEN). CRES was designated as the National Coordination Centre for its fields of activity in accordance with Law No. 2244/94 "Regulation of electricity generation from Renewable Energy Sources" (Government Gazette A' 168/07.10.1994), and Law No. 2702/99 "Various provisions under the competence of the Ministry of Development and other provisions" (Government Gazette A' 70/07.04.1999).

Its primary objective is to promote the deployment of RES / RUE / EE applications at both national and international level, as well as to support—by all appropriate means—activities in these fields (technological, research, advisory, investment-related), with a view to reducing environmental impact throughout the energy production / transmission / consumption chain.

Its organisational structure comprises five (5) Directorates—Renewable Energy Sources, Development Programmes, Energy Efficiency, Energy Policy and Planning, and Administrative and Financial Services—and twenty-two (22) departments, staffed by experienced scientific personnel (a summary is provided in Annex 6.1.2).

The programme under evaluation constitutes a continuation of the successful "GR03" Programme (EEA Grants 2009–2014), managed by the Centre for Renewable Energy Sources and Saving (CRES)**.** This initiative was integrated into the Thematic Area "Renewable Energy Sources (RES)"**,** with the primary objective of increasing the share of RES in energy production and consumption, while concurrently reducing greenhouse gas emissions.

For the design of the current Programme, CRES collaborated with institutions and organisations of *institutional significance* active in the fields of Renewable Energy Sources (RES) and Energy Efficiency (Annex 6.1.1).

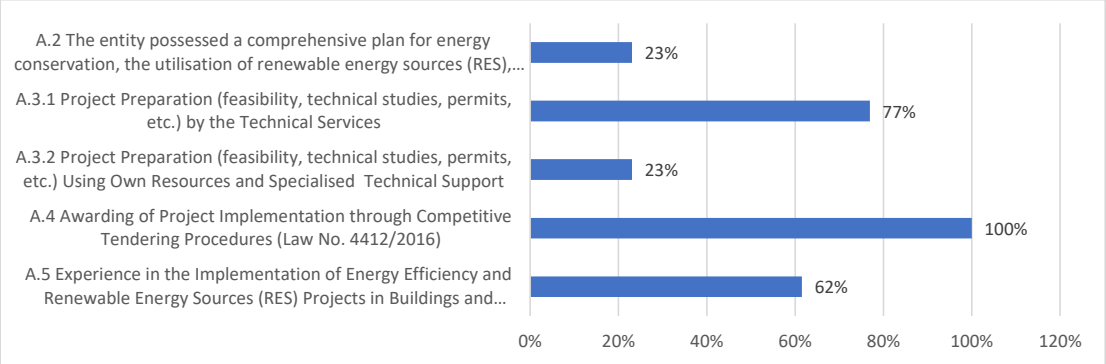
Therefore, CRES holds an institutional role and possesses significant expertise—both managerial and technical—in the design and management of programmes in the field of Renewable Energy Sources. This enables the optimal capitalisation of programme results and contributes decisively to the achievement of the objectives set out in the National Energy and Climate Plan (NECP).

Regarding the final beneficiaries, most entities possess technical departments with experience in the preparation and implementation of co-financed projects focused on energy efficiency and the utilisation of renewable energy sources in buildings and infrastructure. Specifically, based on the responses provided by the beneficiaries in the Programme evaluation questionnaire, the following conclusions can be drawn concerning their management capacity:

- 85% of the entities having been informed about the objectives of the Programme and the funding application process through the Call for Proposals No. 1097/ΚΑΠΕ/22.07.2020 (Unique Internet Publication Number: 6Ξ8Ξ469ΗΚΜ-4ΛΔ), which was published on the official website of CRES. The remaining 15% received relevant information through an external partner or consultant.

- 23% of the entities had a comprehensive plan in place for energy savings or for the use of Renewable Energy Sources (RES) to meet core needs or reduce energy costs
- For 77% of the entities, the project maturation phase (feasibility assessments, technical studies, licensing, etc.) was conducted by their internal technical services, utilizing in-house resources,
- 23% of the entities required specialized technical support for the maturation of their projects,
- For all projects, the procedure stipulated under Law 4412/2016 (Greece) for the award of procurement and service contracts (competitive tender procedure and direct award) was followed.
- 62% of the entities have experience in implementing energy efficiency projects and renewable energy utilization in buildings and infrastructure within the public and wider public sector, during the Programming Periods 2014–2020 and 2021–2027.

Graph 1: Assessment of the Administrative Capacity of Project Implementing Entities (Questions A.2, A.3, A.4 and A.5)



Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme "Renewable Energy, Energy Efficiency" (Programme GR – Energy)

4.1.1.3 Question A.3 Which national and regional needs are addressed by the implementation of the projects, taking into account macroeconomic conditions and the specific characteristics of the sector?

The implementation of the Programme's projects contributes significantly to the achievement of national targets in the areas of renewable energy, energy efficiency, energy security, the completion of the common energy market, as well as the promotion of innovation and competitiveness, as set out in the revised National Energy and Climate Plan (NECP).

Moreover, it is fully aligned with the policy framework and commitments of the European Union, including the European Climate Law. In particular,:

- Climate Targets: Reduction of net greenhouse gas emissions by at least 55% by the year 2030 compared to 1990 levels. The revised National Energy and Climate Plan (NECP) anticipates that this target will be achieved (~51%) without taking into account CO_2 absorption from the Land Use, Land Use Change and Forestry (LULUCF) sector. The reduction may reach -58% if a greater contribution from LULUCF is achieved.

- Improvement of Energy Efficiency: A reduction of final energy consumption by at least 11.70% compared to the projected level of energy use in 2030[1].
- Renewable Energy Penetration: The target for the share of energy from renewable sources in gross final energy consumption is set at a minimum of 43% by the year 2030.

The performance of the Programme is quantified through output indicators and corresponding target values. The expected outcome is summarised in the table below. The third column of the table estimates the Programme's contribution to the national 2030 targets, as set out in the revised National Energy and Climate Plan (NECP).

Table 1: Quantified NECP and EU Targets for 2030 and Contribution of the Programme "Renewable Energy, Energy Efficiency"

S/N	Targets	EU Target for 2030	NECP 2030 Projection	Programme Contribution
1	Reduction of GHG emissions compared to 1990 levels (including LULUCF)	-55,00%	-58,00%	-4.746,23 tonnes CO_2 / year
2	Final Energy Consumption (ktoe)	14,60	15,20	-1,33 ktoe[2] (15.467,69 MWh) / year
3	Renewable Energy Sources (RES) in Gross Final Energy Consumption[3]	42,5%	43,0%	1.543,70 MWh / year

Source: National Energy and Climate Plan (NECP) 2024

Regarding the Operational Programmes of the Regions in which the beneficiary entities are located, the implemented projects contribute to addressing specific needs for the improvement of energy efficiency in the outdated and energy-intensive building stock (80% of public buildings are over 30 years old), including public infrastructure and facilities. The projects support the reduction of energy consumption through the integration of Renewable Energy Sources (RES), the decrease in operating costs, and the reduction of CO_2 emissions.

Overall, these interventions contribute to improving the quality of life for users of public infrastructure and the wider community. The following table presents the Programme's contribution to the Specific Objectives of the respective Regional Operational Programmes.

1 In compliance with Article 4 of Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955

2 1 toe = 11,63 MWh

3 Calculation in accordance with the provisions of RED III, using the "Eurostat Sharestool Draft_version 5" tool

Table 2: Contribution of the Programme "Renewable Energy, Energy Efficiency" (Programme GR - Energy) to Addressing Needs / Achieving the Objectives of Regional Programmes of the Programming Period 2021 – 2027

S/N	Specific Objectives of Regional Programmes	Eastern Macedonia and Thrace	Attica	North Aegean	Thessaly	Central Macedonia	Central Greece
1	RSO2.1 Promoting energy efficiency and reducing greenhouse gas emissions (ERDF) ➢ Energy efficiency measures in public/municipal buildings under regional and local jurisdiction (building insulation, heating systems, RES utilization, automation systems) in sectors including: health, education, sports, culture, public administration and local government, etc.	X	X	X	X	X	X
2	RSO2.2 Promoting renewable energy in accordance with the Renewable Energy Directive (EU) 2018/2001, including the sustainability criteria set out therein (ERDF) ➢ Renewable energy production in order to meet the demand in public buildings, facilities and infrastructure of the public sector.	X	X		X		

Source: Regional Programmes of the 2021-2027 Programming Period

Despite its relatively limited quantitative contribution to the national climate targets, the Programme plays a positive role through the demonstrative nature of the implemented interventions. It actively supports the promotion of innovative solutions for improving the energy performance of public sector buildings and infrastructure, notably through the combined use of renewable energy sources. This is further reinforced by the implementation of targeted publicity actions and the dissemination of acquired experience and best practices.

4.1.1.4 Question A.4 – How does the programme address the needs of stakeholders (policy makers, organisations, target groups)?

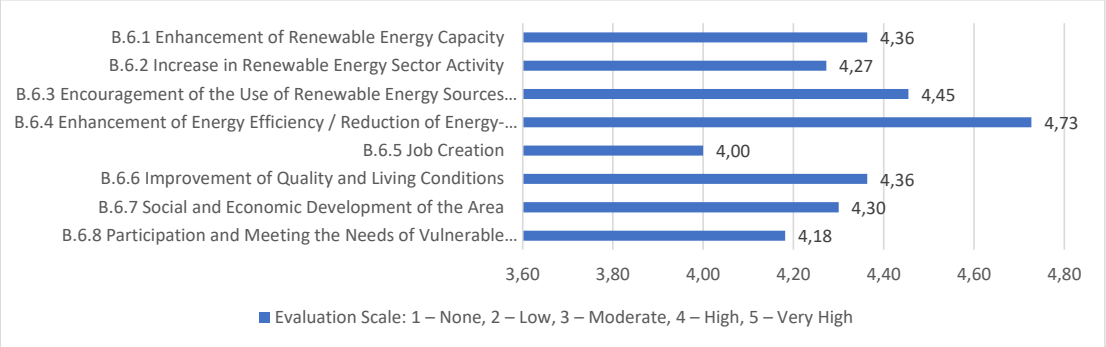
With regard to policy makers, it is noted that the Programme reinforces national and European efforts to highlight the importance of policy objectives concerning the energy upgrade of public infrastructure and energy efficiency, in line with both national and Union targets. The Programme aligns with the obligation of all public sector entities to prepare and subsequently implement Sustainable Energy and Climate Action Plans (SECAPs), and in the case of local authorities, Municipal Emissions Reduction Plans (MERPs), pursuant to the National Climate Law. These obligations are guided by the detailed directions and available tools provided by the Ministry of Environment and Energy.

With regard to the private sector and the need for businesses, their production activities, and individuals to adapt to the provisions of the Climate Law—particularly in relation to emissions reduction and the lowering of their carbon footprint—the dissemination of energy upgrade and energy-saving practices, both through end-users and beneficiaries as well as through publicity actions, contributes positively to the overall implementation of policy measures. This, in turn, supports the broader goal of energy sustainability and the achievement of national targets.

According to the data collected from the responses to the programme results evaluation questionnaire (Questions B.5 and B.6 – Annex 6.2), all implementing bodies assessed that the interventions carried out generated both direct benefits for the final beneficiaries of the projects and indirect benefits for the wider intervention area and the local community.

The identified benefits primarily concern the enhancement of the energy performance of buildings/infrastructure, the encouragement of the use of renewable energy sources (RES), the upgrading of RES potential, and the improvement of quality of life and living conditions. Secondarily, they relate to the social and societal uplift of the respective areas, the increase in activity within the RES sector, the inclusion and addressing of the needs of vulnerable population groups, and the creation of employment opportunities. It should be noted that two implementing bodies did not respond to this question, while one provided only a partial response. The detailed results from the responses of the Implementing Bodies are as follows:

Graph 2: **Evaluation of Benefits / Impacts Resulting from the Implementation of the Programme's Projects for Both the Implementing Bodies and the Local Community (Question B.6)**



Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme "Renewable Energy, Energy Efficiency" (Programme GR – Energy)

The total number of beneficiaries who derived direct benefits from the implementation of the interventions (users of the infrastructure) amounts to 587,887 individuals, while the Social Benefit Indicator (Total Public Expenditure / Number of citizens receiving direct benefits from the Programme) reached approximately €22.50 per person.

The number of indirect beneficiaries within the framework of publicity, information, awareness-raising, and dissemination of project results is estimated at 110,005 individuals.

4.1.1.5 Question A.5: Does the Planning of the Programme and the projects implemented serve the objectives of the Programme?

The Programme "Renewable Energy Sources, Energy Efficiency (GR - Energy)" aims at the "improvement of Energy Efficiency" through the support of the implementation of innovative solutions to increase energy production from renewable sources and enhance energy efficiency in public social infrastructure.

The primary objectives of the Programme are:

- the promotion of nearly zero-emission buildings in the public sector, through investment in local renewable energy production,

- the exchange of know-how and experience aimed at increasing the Energy Efficiency of buildings,
- the strengthening of the local economy and its communities.

To assess the extent to which the Programme meets its objectives, an evaluation is conducted regarding the relevance of the thirteen (13) included projects to the Programme's objectives and their alignment with the needs of the Policy Sector (Renewable Energy Sources and Energy Efficiency). The average score obtained across all projects constitutes the degree of achievement of the Programme.

The rating range from 1 (minimum) to 5 (maximum), with the following interpretation:

- 1 = The Programme/project was initially not aligned with the development needs and priorities established at various levels;
- 2 = The Programme/project was initially not aligned with the development needs but was aligned with the priorities established at various levels;
- 3 = The Programme/project was initially not aligned with the development needs and priorities established at various levels, but during its implementation managed to address the evolving needs;
- 4 = The Programme/project was initially aligned with the development needs and priorities established at various levels but was unable to fully address all evolving needs;
- 5 = The Programme/project was fully aligned from the outset and remained so over the years with the development needs and priorities established at various levels.

The table with the evaluation (ratings) of the implemented projects is presented below

Table 3: Assessment of the Relevance of the Included Projects to the Objectives of the Programme and the Needs of the Policy Sector (Renewable Energy Sources and Energy Efficiency)

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
1	Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini (MIS Code: 5075131)	5	The project resulted in the improvement of the energy efficiency of the facilities at the 2nd Municipal Stadium of Katerini through the use of innovative technologies, contributing to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of new jobs, and the enhancement of the local community's resilience. The project is fully aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Replacement of window and door frames, • Hybrid Natural Gas Heat Pump, • LED lighting fixtures, • Installation of a Demonstration Electric Vehicle Charging Station powered by photovoltaics, • Communication activities based on the outcomes of the project.

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
2	nZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato - Tavros (MIS Code 5075035)	5	The project led to the transformation of the Moschato Indoor Gymnasium into a model zero-energy sports facility through the integration of Renewable Energy Sources (RES) and Energy Efficiency technologies, using innovative solutions. It contributed to the reduction of CO_2 emissions, the increase in renewable energy production, job creation and the strengthening of the local community's capacity. The project is fully aligned with the priorities defined at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Roof insulation, energy-efficient windows and doors, and automation systems for consumption control, • Air-source heat pump, • LED lighting fixtures, • Installation of a Demonstration Electric Vehicle Charging Station powered by photovoltaics, • Communication and dissemination activities based on the project's results.
3	Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station (MIS Code: 5074958)	4	The project resulted in the transformation of the Delphi Art Station into a nearly zero-energy building through the use of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the creation of new jobs, and the enhancement of the local community's capacity. Due to its location on the outskirts of the Delphi archaeological site, it is the most visited and prominent art station of the School, thereby enhancing the demonstrative character of the interventions implemented. Given its innovative nature, the project has been proposed for use in communication and publicity activities by the Donor States and the Financial Mechanism Office (FMO). The project is aligned with the priorities set at the local, regional, national, and European levels in the areas of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal insulation of the building envelope and roof, energy-efficient windows and doors, and automation systems for consumption control, • VRV air-conditioning units for heating and cooling, • LED lighting, • Solar collectors for domestic hot water production, • Operation of an interactive smart laboratory for the implementation of innovative environmental and energy awareness activities. It is noted that the originally planned installation of RES (photovoltaic panels) was not implemented.

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
4	Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece (MIS Code: 5075132)	4	The project resulted in the energy upgrade of social infrastructure (the Nursery School in Ano Vathy, the Primary School in the community of Mytilinioi, and the Mytilinioi Cultural Centre), as well as of the street lighting in the historic area of Pythagoreio in the Municipality of East Samos, through the application of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the creation of new jobs, and the strengthening of the local community's capacity. The project is aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal insulation of the building envelope and roof, energy-efficient windows and doors, and automation systems for consumption control, • Modern air-conditioning units, • Heat pumps, • LED lighting, • Installation of Electric Vehicle Charging Stations, • Communication activities based on the results of the project. It is noted that the charging stations were installed without the use of RES, despite the original design provision, due to saturation of the local grid and the refusal of the HEDNO (Hellenic Electricity Distribution Network Operator) to issue connection terms.
5	Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens (MIS Code:5073760)	5	The project resulted in the energy upgrade of the facilities of the Agricultural University of Athens (AUA) through the use of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the increase in renewable energy production, the creation of new jobs, and the strengthening of the local community's capacity. The project is aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Modern heating and cooling systems (heat pumps and fan coil units), • Energy consumption monitoring and analysis system, • LED lighting, • Installation of a Demonstration Electric Vehicle Charging Station powered by photovoltaics, • Electric passenger vehicle, • Operation of an interactive smart laboratory for the implementation of innovative environmental and energy awareness activities.

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
6	Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece (MIS Code: 5074843)	5	The project resulted in the energy upgrade of the Farsala Cultural Centre and the creation of a model environmental education park through the use of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of new jobs, and the enhancement of the local community's resilience. The project is aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal insulation of the building envelope and roof, energy-efficient windows and doors, and automation systems for consumption control (BEMS), • Photovoltaic system with a nominal capacity of 20 kWp, • LED lighting, • Installation of Electric Vehicle Charging Stations, • Operation of an interactive smart laboratory for the implementation of innovative environmental and energy awareness activities.
7	Integration of Innovative Energy Technologies in Central Building Infrastructure of High acessibility of AUTh (MIS Code : 5075027)	5	The project resulted in the transformation of the facilities of the School of Sciences at Aristotle University of Thessaloniki (AUTH) into a model energy-efficient building through the application of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of new jobs, and the strengthening of the local community's capacity. The project is aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal and moisture insulation of the roof, • Automation systems for consumption control (BEMS), • Air-to-water heat pumps, • LED lighting, • Demonstration solar-powered electric vehicle charging station with a capacity of 5 kWp, • Training and communication activities based on the results of the project.
8	Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros (MIS Code : 5074832)	5	The project resulted in the energy upgrade of the municipal buildings and technical facilities of Skyros Municipality through the use of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of new jobs, and the enhancement of the local community's resilience.

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
			The project is fully aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • A renewable energy microgrid (60 kWp photovoltaic station) with virtual net metering and a backup power system utilising renewable energy and hydrogen at the Skyros Wastewater Treatment Plant, • Metering equipment, • Heat pump for heating the Municipal Primary School, • LED lighting and autonomous LED lights, • Three electric vehicles and two charging stations, • Training and communication activities based on the project's results.
9	Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama (MIS Code 5074878)	5	The project resulted in the energy upgrade of the technical facilities of the Drama Water and Sewerage Company through the use of innovative technologies. It contributed to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of new jobs, and the enhancement of the local community's vitality. The project is fully aligned with the priorities set at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • A renewable energy microgrid (100 kWp photovoltaic station) with a backup power system using renewable energy and hydrogen via an electrolyser at the Wastewater Treatment Plant (WWTP), • Metering equipment, • LED lighting and autonomous LED lights, • Two electric vehicles, seven electric bicycles, and two charging stations, • A multifunctional charging column, • Training and communication activities based on the project's results. Due to its innovative nature, the project is proposed for use in communication and publicity purposes by the donor countries and the Financial Mechanism Office (FMO).
10	Demonstration energy renovation projects of municipal buildings of North Evros (MIS Code : 5074952)	5	The project resulted in the energy upgrade of the former Kastanea Primary School in Orestiada, the Special Primary School of Thourio in Orestiada, the First Nursery Station of Didymoteicho, and the Minority Primary School of Megalo Dereio.

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
			The project was implemented through the utilisation of innovative technologies, contributing to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of employment opportunities, and the enhancement of the local community's dynamism. The project is fully aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal insulation of the building envelope walls and roof, energy-efficient window frames, and automation systems for consumption control, • Measurement equipment, • LED lighting, • Heat pumps, • Underfloor heating, • Photovoltaic systems (10 kW) for energy net metering (It should be noted that a partial reduction of the original scope was effected, specifically the photovoltaic system installation was not carried out at the building of the First Nursery Station of Didymoteicho); • Hybrid energy storage system (a system for storing surplus electricity generated by the photovoltaic systems in lithium-ion batteries and thermal batteries); • Educational and Communication actions based on the outcomes of the project.
11	Energy Upgrade of Perigialis school buildings of the Municipality of Kavala (MIS Code 5073838)	5	The project resulted in the energy upgrade of the largest school complex in the Regional Unit of Kavala (Perigiali neighbourhood), comprising the 1st Vocational High School (EPAL) of Kavala, the 2nd Evening Vocational High School of Kavala, the Evening Gymnasium of Kavala, the Laboratory Centre of Kavala, and the Vocational Training Institute (DIEK) of Kavala. The project was implemented through the utilisation of innovative technologies, contributing to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of employment opportunities, and the enhancement of the local community's dynamism. The project is fully aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal insulation of the building envelope walls and roof, energy-efficient window frames and fixed shading systems,

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
			• Central heating management system (Building Management System - BMS) and energy consumption measurement; • LED lighting, • Air-cooled heat pumps, • Water-cooled heat pump combined with a closed-loop geothermal system, • Ducted air-conditioning units and duct networks, • Photovoltaic system operating under a net metering scheme with a capacity of 100 kW, • Hybrid energy storage system (system for storing surplus electricity generated by the photovoltaic systems in lithium-ion batteries and thermal batteries), • Educational and Communication activities based on the results of the Project.
12	Energy upgrades and RES installation at public buildings of Vari Voula Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism (MIS Code: 5075038)	5	The project resulted in the energy upgrade of seven (7) municipal buildings in the Municipality of Vari – Voula – Vouliagmeni, incorporating combined use of Renewable Energy Sources (RES). The buildings concerned are the Technical Services Building, the 2nd Kindergarten of Vari, the 1st Primary School of Vari, the 1st Gymnasium of Vari, the Lyceum of Vari, the Social Services Building, and the State Nursery of Voula. These buildings fall within the category of Nearly Zero-Energy Buildings (nZEB). The project was implemented through the deployment of innovative technologies, contributing to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of employment opportunities, and the enhancement of the local community's dynamism. The project is fully aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Thermal insulation of the roof in two buildings (the 1st Gymnasium and the Lyceum of Vari), • Photovoltaic stations (0.18 MW) installed on rooftops for self-generation of electricity via virtual net metering (applied to all buildings), • Remote monitoring system and automation, • LED lighting, • High-efficiency heat pumps, • Communication activities based on the outcomes of the Project.

S/N	Project Title	Rating	Περιγραφή - Ανάλυση
13	Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri (MIS Code: 5074776)	5	The project resulted in the energy upgrade of three (3) buildings within the Municipality of Agii Anargyri (1st Gymnasium – 1st General Lyceum of Kamatero, 7th Primary School of Kamatero, and 8th Primary School of Agioi Anargyroi) through the implementation of measures aimed at improving energy efficiency and local electricity production from Renewable Energy Sources (RES). It is noted that the initial design included five (5) buildings; however, following a modification request submitted by the beneficiary, the selected buildings were changed, while maintaining an equivalent level of outputs and results. The project was implemented through the use of innovative technologies, contributing to the reduction of energy consumption and CO_2 emissions, the increase of renewable energy production, the creation of employment opportunities, and the enhancement of the local community's dynamism. The project is fully aligned with the priorities established at local, regional, national, and European levels in the fields of Energy Efficiency and Renewable Energy Sources. Innovative features include: • Building Energy Management Systems (BEMS), • LED lighting, • Air-to-water heat pumps with thermal storage tanks, • Air conditioning units, • Photovoltaic Station (20 kWp) at the 8th Primary School of Agioi Anargyroi, • Communication activities based on the outcomes of the Project.
The Average Rating Across All Projects of the Programme		**4,85**	

Source: Project Completion Reports and Indicator Performance Reports (CRES)

Based on the above, the entirety of the projects achieves an improvement in the energy efficiency of building infrastructures and facilities through the implementation of innovative technological solutions, yielding positive outcomes in the environmental indicators of the region (notably, the reduction of CO_2 emissions). In the majority of projects (with the exception of the Athens School of Fine Arts and the Municipality of Eastern Samos), renewable energy production (photovoltaic systems) is utilised to meet internal energy needs, and educational and communication activities are implemented based on the project outcomes, facilitating the exchange of acquired know-how and experience.

Simultaneously, the implementation of these projects contributes to the strengthening of local economies (through the creation of new employment opportunities) and to the improvement of quality of life within their respective communities.

The average rating of the implemented projects within the programme is 4.85 (nearly 5); therefore, the programme's design and the projects carried out contribute effectively to the achievement of its objectives. From its inception and throughout the years, the programme has remained fully aligned with the developmental needs and priorities established for the sectors of Energy Efficiency (EE) and Renewable Energy Sources (RES) at various levels.

4.1.2 Final Evaluation of the Programme's "Relevance"

The Programme was designed by CRES (Centre for Renewable Energy Sources and Saving) with the participation of "institutionally significant" bodies and organisations active in the fields of Renewable Energy Sources (RES) and Energy Efficiency. CRES holds a statutory role and possesses substantial expertise (both managerial and technical) in the design and management of programmes in the RES sector, which creates significant opportunities for the optimal capitalisation of results, decisively contributing to the achievement of the objectives of the National Energy and Climate Plan (NECP), which are fully aligned with the policies and commitments of the European Union. The implemented projects also contribute to meeting the needs of regional programmes within the regions where the beneficiary bodies operate, specifically in the fields of energy efficiency and RES.

Despite its limited contribution to national climate targets, the Programme - through the demonstrative nature of its implemented interventions - promotes the adoption of innovative solutions for enhancing the energy efficiency of public sector building infrastructure and facilities, combining renewable energy sources (RES). This is achieved through dedicated visibility actions and dissemination of acquired expertise/good practices

All implementing bodies assessed that the interventions carried out yielded both direct benefits for the final beneficiaries of the projects and indirect benefits for the wider intervention areas and local communities.

The Programme, through the demonstrative actions of its thirteen (13) integrated projects, delivered tangible and measurable energy, environmental and economic benefits through the energy upgrade of energy-intensive public building infrastructure and facilities, combining RES technologies. Concurrently, it made a substantial contribution to local economic development, public familiarization with sustainable development practices, quality of life improvements and mitigation of socio-economic inequalities. Furthermore, the Programme strengthened bilateral cooperation between Greece and Donor States in the fields of Renewable Energy Sources and Energy Efficiency, laying the groundwork for further collaboration and development.

From the design stage through to its completion, the Programme remained fully aligned (demonstrating absolute relevance) with the developmental needs and priorities established for the sectors of Energy Efficiency (EE) and Renewable Energy Sources (RES) at various levels.

4.2 Effectiveness

The effectiveness of the programme in achieving the set objectives is examined and analysed.

The evaluation of effectiveness includes the measurement of the physical scope (outputs and outcomes) of each Project and will be calculated based on the ratio of the implemented physical scope at the completion stage of each Project to the initially planned physical scope.

Within this context, it is noted that the final evaluation of the Programme's effectiveness will be conducted using the economic weighting method, by assessing the economic weight of each Project within the Programme.

The data regarding the achievement of output and outcome indicators were derived from the responses of the implementing bodies to the Programme's evaluation questionnaire (Questions B.1, B.2, B.5, D.1, and E.2 – Annex 6.2), with concurrent cross-verification of their accuracy with the Project Completion Reports and Indicator Performance Reports.

4.2.1 Evaluation of the Achievement of the Programme's Qualitative, Quantitative, and Financial Objectives

The effectiveness evaluation of the Programme includes examination of the following parameters:

- Analysis of the Programme's project outputs and results. The effectiveness level of projects is calculated as the ratio of achieved value to target value per output indicator, according to the following formula:

Project Effectiveness Index (Proj. Eff.I) = Physical Implementation / Physical Target

- Assessment of the contribution of the Programme's projects to the achievement of the set objectives. This is calculated as the ratio of the achieved output of each project to the sum of the achieved outputs of all projects within the Programme per output indicator, based on the following formula:

Percentage Contribution of Projects to Achieved Outputs (% Contr.) = Physical Implementation of Project / Total Physical Implementation of Projects

- Assessment of the degree of achievement of the Programme's intended objectives. This is calculated as the ratio of the sum of the achieved outputs of all projects within the Programme to the original targets of the Programme per output indicator, based on the following formula:

Degree of Achievement of Programme Objectives (% Achiev. Prog.) = Total Physical Implementation of Projects / Physical Target of the Programme

- Estimation of the Programme's Effectiveness Index, based on the following formula:

Programme Effectiveness Index (Prog. Eff.I) = Σ[(Proj. Eff.I)E x (W)Proj.]

όπου:

- Eff.I. = Effectiveness Index
- W = Weighting Factor
- Proj. = Project
- Prog. = Programme

The weighting factor is determined through two approaches:

a) Output-based weighting:

This reflects each project's contribution to the total achieved outputs across all projects per output indicator, expressed as the Project Contribution Percentage to Achieved Outputs (% Cont.).

b) Financial weighting:

The financial weighting factor is calculated based on the final implemented financial scope (total eligible public expenditure) of individual projects within the Programme.

The calculations presented in this section are based on the final eligible expenditures of the projects (€13,181,885.65), which, in total, are €45,178.03 lower than the overall Public Expenditure allocated to the projects within the Programme.

Taking into account the total Public Expenditure of the Projects amounting to €13,227,063.68, the weighted effectiveness of the Programme based on financial significance varies due to discrepancies observed in certain projects. As part of the analysis, the degree of financial completion of the projects is also evaluated, namely the absorption rate of the available resources for the projects within the Programme. The above are summarised in the table below.

Table 4: Public Expenditure of the Programme's Projects and Assessment of the Degree of Financial Completion and Financial Weighting Factors

Beneficiary	Inclusion Budget (€) (A)	Public Expenditure (€) (B)	Eligible Public Expenditure (€) (C)	Degree of Financial Completion of the Projects (D)= (C)/(A)	Financial Weighting Factor
1. Municipality of Katerini	959.649,44	882.642,08	882.642,08	91,98%	6,70%
2. Municipality of Moschato - Tavros	831.244,45	741.341,68	741.341,68	89,18%	5,62%
3. The School of Fine Arts	1.266.239,15	912.869,58	912.869,58	72,09%	6,93%
4. Municipality of East Samos	749.593,78	717.553,52	694.969,24	92,71%	5,27%
5. Agricultural University of Athens	1.044.349,31	1.010.928,58	1.002.568,30	96,00%	7,61%
6. Municipality of Farsala	968.458,23	688.161,79	688.161,79	71,06%	5,22%
7. Aristotle University of Thessaloniki (AUTH)	1.078.229,25	1.043.993,86	1.043.993,86	96,82%	7,92%
8. Municipality of Skyros	1.237.027,83	1.235.611,66	1.235.611,66	99,89%	9,37%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	1.295.770,69	1.291.274,01	1.291.274,01	99,65%	9,80%
10. Municipality of Orestiada	1.300.000,00	1.116.084,96	1.101.851,49	84,76%	8,36%
11. Municipality of Kavala	1.299.638,22	1.102.658,85	1.102.658,85	84,84%	8,36%
12. Municipality of Vari - Voula - Vouliagmeni	1.296.961,00	1.193.247,18	1.193.247,18	92,00%	9,05%
13. Municipality of Agii Anargiri - Kamaterou	1.299.999,99	1.290.695,93	1.290.695,93	99,28%	9,79%
Total	**14.627.161,34**	**13.227.063,68**	**13.181.885,65**	**90,12%**	**100,00%**

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

According to the Programme description, its primary strategic objective is to achieve "lower carbon intensity energy and enhanced security of supply," with the intended outcome (based on the programme agreement[4]) being the "improvement of energy efficiency." Specifically, this includes the reduction of CO_2 emissions by 4,834 tonnes, a decrease in energy consumption by 4,096 MWh per annum, an increase in energy production from renewable sources by 1,250 MWh per annum, the creation of 18 new jobs, cost savings amounting to €537,000 per annum, and an increase in the number of individuals benefiting from the improvement of public social infrastructure, totalling 67,650 persons. The available budget for the implementation of related projects was €14,677,424 (of which €11,008,068 was co-financed by the EEA Grants).

[4] Government Gazette Issue B' 6571/27.09.2023

The thirteen (13) projects integrated into the Programme, corresponding to an equal number of beneficiaries, amounted to a total Budget of €14,627,161.34 (including additional funding received by the entities following a relevant request).

Following project completion, the finalised total financial scope of the projects amounted to €13,227,063.68, whilst the total final eligible expenditures reached €13,181,885.65. The projects deliver the following outcomes: reduction of CO_2 emissions by 4,746.23 tonnes, decrease in energy consumption by 15,467.69 MWh per annum, increase in energy production from renewable sources by 1,543.70 MWh per annum, creation of 26 new jobs, cost savings amounting to €1,988,033.55 per annum and increase in the number of individuals benefiting from the improvement of public social infrastructure, totalling 587,887 persons.

The Financial Completion Rate of implemented projects ranges between 71.06% and 99.89%, while the Programme's overall rate is estimated at 90.12%. The lowest absorption rates were recorded for the Municipality of Farsala (71.06%) and Athens School of Fine Arts (72.09%) while the highest absorption rates were achieved by the Municipality of Skyros (99.89%), Municipal Water and Sewerage Company of Drama (99.65%) and the Municipality of Agioi Anargyroi-Kamatero (99.28%)

Regarding the projects of the Managing Authority (programme management costs), which were incorporated with an initial budget of €1,233,333 (co-financed by the EEA Grants with €925,000), the total finalised financial scope and final eligible expenditures amounted to €1,103,995.16.

As presented in the following table, the implementation of the Programme's projects resulted in the overachievement of most output and result targets, both in relation to the initial targets set in the Programme Agreement and the objectives established during the projects' integration into the Programme.

The Programme's projects delivered positive outcomes for the following targets:

- EOX_R001 "Number of jobs created": 100.00% achievement
- EOX_R010 "Estimated annual CO_2 emissions reduction": 100.51% achievement
- EOX_R037 "Estimated monetary savings ": 151.43% achievement
- EOX_R039 "Estimated increase in renewable energy production": 113.07% achievement
- EOX_R041 "Number of people who declare that they benefited from improved public social infrastructure": 100.00% achievement

Performance was slightly below expectations for:

- EOX_R038 "Estimated energy savings": 97.33% achievement

Partial, yet positive performance was recorded for the following outputs:

- EOX_O012 Number of projects involving cooperation with a donor project partner: 92.31%
- EOX_O034 Installed capacity for production of renewable energy: 79.73%
- EOX_O045 Number of conferences / workshops held related to results from projects: 91.30%

Table 5: Achievement Rate of Output and Result Indicators (Effectiveness) based on Programme Agreement targets and Project-scoping dimensions at inclusion stage (Total physical implementation of projects / Programme's physical target)

A/A	Indicator Number, Title and Unit of Measurement	Indicator Achievement	Targets According to the Programme Agreement	Targets Set Upon Project Inclusion	Target Achievement as Set in the Programme Agreement	Target Achievement According to the Initial Dimensioning Upon Project Inclusion
1	EOX_O004 Number of awareness raising campaigns carried out (number)	13,00	7,00	13,00	**185,71%**	**100,00%**

A/A	Indicator Number, Title and Unit of Measurement	Indicator Achievement	Targets According to the Programme Agreement	Targets Set Upon Project Inclusion	Target Achievement as Set in the Programme Agreement	Target Achievement According to the Initial Dimensioning Upon Project Inclusion
2	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	12,00	13,00	13,00	**92,31%**	**92,31%**
3	EOX_O034 Installed capacity for production of renewable energy (in MW)	1,18	0,95	1,48	**123,79%**	**79,73%**
4	EOX_O039 Number of people reached by awareness campaigns (number)	110.005,00	65.000,00	109.635,00	**169,24%**	**100,34%**
5	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	22,00	13,00	22,00	**169,23%**	**100,00%**
6	EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	21,00	13,00	21,00	**161,54%**	**100,00%**
7	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	21,00	13,00	21,00	**161,54%**	**100,00%**
8	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	2.594,00	650,00	2.594,00	**399,08%**	**100,00%**
9	EOX_O045 Number of conferences / workshops held related to results from projects (number)	42,00	39,00	46,00	**107,69%**	**91,30%**
10	EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	13,00	13,00	13,00	**100,00%**	**100,00%**
11	EOX_R001 Number of jobs created	26,00	18,00	26,00	**144,44%**	**100,00%**
12	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	4.746,23	4.834,00	4.721,96	**98,18%**	**100,51%**
13	EOX_R037 Estimated monetary savings in EUR/year	1.988.033,55	537.000,00	1.312.827,80	**370,21%**	**151,43%**
14	EOX_R038 Estimated energy savings (in MWh/year)	15.467,69	4.096,00	15.891,58	**377,63%**	**97,33%**
15	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	1.543,70	1.250,00	1.365,30	**123,50%**	**113,07%**
16	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	587.887,00	67.650,00	587.877,00	**869,01%**	**100,00%**

A/A	Indicator Number, Title and Unit of Measurement	Indicator Achievement	Targets According to the Programme Agreement	Targets Set Upon Project Inclusion	Target Achievement as Set in the Programme Agreement	Target Achievement According to the Initial Dimensioning Upon Project Inclusion
17	Level of trust between cooperating entities in Beneficiary States and Donor States	4,5	≥4,5		**100,00%**	**100,00%**
18	Level of satisfaction with the partnership	4,5	≥4,5		**100,00%**	**100,00%**
19	Share of cooperating organisations that apply the knowledge acquired from bilateral partnership (percentage)	50%	≥50%		**100,00%**	**100,00%**

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports, Indicator Performance Reports and Programme Operator Implementation Report

The findings demonstrate the Programme's effective implementation, achieving overperformance on both the initially established Programme targets and the objectives of the integrated projects, despite utilising fewer financial resources

Focusing the analysis at project level and comparing their performance against the established targets allows the evaluation of their effectiveness.

Annexes 6.3.1.1 - 6.3.1.3 provide detailed achievement data (output & outcome indicators) and effectiveness assessment per project. The following section presents cases in which the outcome indicators exceeded or fell short of the established targets.

- All projects successfully achieved their targets concerning the creation of new jobs.
- The highest achievement rates for the estimated annual reduction of CO_2 emissions were recorded in the projects of the Municipality of Kavala (125.56%) and the Municipal Water and Sewerage Company of Drama (101.00%), while the lowest were observed in the Municipalities of Vari – Voula – Vouliagmeni (76.91%) and Orestiada (91.59%).
- The highest estimated cost savings were achieved by the projects of the Municipalities of Kavala (11,152.74% – subject to verification), Katerini (166.62%), Skyros (162.41%), Vari – Voula – Vouliagmeni (138.29%), and Municipal Water and Sewerage Company of Drama (117.66%), whereas the lowest was recorded by the Municipality of Agii Anargyri – Kamatero (78.91%).
- The highest indicators for estimated energy savings were reported in the projects of the Municipality of Orestiada (109.02%) and the Municipal Water and Sewerage Company of Drama, while the lowest was noted in the Municipality of Vari – Voula – Vouliagmeni (65.97%).
- The highest indicators for the estimated increase in renewable energy production were recorded in the projects of the Municipality of Skyros (2,775.00% – due to an incorrect initial entry in the technical documentation regarding the estimated increase), the Municipal Water and Sewerage Company of Drama (1,610.00%), and the Municipality of Vari – Voula – Vouliagmeni (102.47%), while the lowest was recorded in the Municipality of Orestiada (85.59%). The Athens School of Fine Arts and the Municipality of East Samos did not report relevant outputs due to non-implementation of the sub-projects concerning RES (photovoltaics).

- The only project that marginally exceeded the target for the number of individuals reporting to have benefited from the improvement of public social infrastructure was that of the Municipality of Vari – Voula – Vouliagmeni (100.15%).

The degree to which each project achieved its initially established targets may offer a preliminary assessment of its effective implementation. However, in order to evaluate the overall effectiveness of the Programme, it is also necessary to consider the relative weight of each project, both in terms of its contribution to the Programme outcome indicators and in financial terms.

Annex 6.3.1.4 presents a table estimating each project's contribution indicators (% Contr.) to the Programme's Achieved Outputs.

- The Municipalities of Vari – Voula – Vouliagmeni and Agii Anargyri – Kamatero recorded the highest contribution (15.38%) to the output related to job creation.
- The Municipalities of Katerini (26.63%), Skyros (14.77%), and Kavala (13.60%) contributed most significantly to the annual CO_2 emission reduction indicator, while the Municipality of Agii Anargyri – Kamatero recorded the lowest contribution (0.82%).
- Regarding cost savings, the Municipalities of Katerini (38.54%) and Kavala (14.97%) contributed the most, whereas the Municipality of Agii Anargyri – Kamatero had the lowest contribution (0.60%).
- The highest contribution to energy savings was made by the Municipalities of Katerini (27.02%) and Kavala (17.49%), while the Municipality of Agii Anargyri – Kamatero recording the lowest contribution (0.70%).
- The municipalities contributing most to the renewable energy production indicator were Kavala (29.54%), Vari – Voula – Vouliagmeni (18.52%), Farsala (16.65%) and the Municipal Water and Sewerage Company of Drama (10.43%), while the Aristotle University of Thessaloniki recorded the lowest contribution.
- Finally, the highest contribution to the indicator concerning individuals reporting benefits from improved public social infrastructure was observed in the Municipalities of Moschato – Tavros (24.06%), Farsala (19.79%), the Agricultural University of Athens (17.94%), and the Municipality of Katerini (12.76%), while the lowest was recorded by the Municipality of Skyros (0.51%) and the Municipal Water and Sewerage Company of Drama (0.56%).

When evaluating the projects collectively in terms of both their achievement of targets and their contribution to the Programme's realised outputs, it is estimated that the projects implemented by the Municipalities of Katerini, Kavala, Farsala, and Skyros demonstrate the highest overall effectiveness within the Programme.

To ensure a reliable assessment of the Programme's effectiveness level, the corresponding effectiveness level of the projects must be weighted by their contribution to the Programme's outputs (product of effectiveness indicators and weighting coefficient).

The weighting coefficient of each project in relation to the Programme's realised outputs is determined as the ratio of the project's achieved outputs for each indicator to the total sum of the corresponding outputs across all Programme projects.

Furthermore, weighting the indicators according to each project's Financial Weight adds another critical dimension to assessing the Programme's overall effectiveness (product of effectiveness indicators and financial weight coefficients).

Annexes 6.3.1.5 and 6.3.1.6 present detailed tables outlining the weighted assessment of the effectiveness of both the individual projects and the Programme as a whole. The weighting is based on each project's relative contribution to the achieved output indicators and its financial significance within the Programme.

With regard to the weighting of effectiveness based on each project's contribution to the achieved output indicators, the following results were noted:

- The weight (30.77%) of the projects of the Municipalities of Vari – Voula – Vouliagmeni and Agii Anargyri – Kamatero regarding the output of the indicator for created jobs significantly contributes (30.77%) to maintaining the weighted effectiveness of the Programme for this indicator at 100.00%.
- The increased weight (55.00%) of the projects of the Municipalities of Katerini, Skyros, and Kavala for the annual reduction of CO_2 emissions, combined with the high effectiveness of the Skyros project, contribute substantially (58.48%) to achieving the Programme's weighted effectiveness for this indicator at 101.71%.
- Projects with the highest weight (53.50%) in cost savings output (Municipalities of Katerini and Kavala), alongside the very high effectiveness of the project of Kavala, played a key role in reaching the Programme's weighted effectiveness for this indicator at 1,733.47%.
- The weight of the projects of the Municipalities of Katerini and Kavala contributes 44.51% to the weighted effectiveness of the Programme for energy savings. Due to the low effectiveness of the Vari – Voula – Vouliagmeni project (65.97%), the Programme's total weighted effectiveness for this indicator is 98.36%.
- For renewable energy production, the exceptionally high effectiveness of the projects of the Municipality of Skyros and the Sewerage Company of Drama contributed decisively to achieving the Programme's weighted effectiveness at 448.93%.
- The increased weight (74.55%) of the projects of the Municipalities of Moschato – Tavros, Farsala, Katerini, and the Agricultural University of Athens, regarding the output of the indicator on the number of individuals who report benefiting from improved public social infrastructure, significantly supports the Programme's weighted effectiveness at 100.00%.

Regarding the weighting of effectiveness based on financial contribution across projects, the following results were noted:

- Despite the relatively homogeneous distribution of financial weight among the projects within the Programme, the projects implemented by the Municipal Water and Sewerage Company of Drama and the Municipalities of Agioi Anargyroi–Kamatero, Skyros, and Vari–Voula–Vouliagmeni account for 38.01% of the Programme's eligible public expenditure.
- The projects implemented by the the Municipal Water and Sewerage Company of Drama and the Municipalities of Agioi Anargyroi–Kamatero, Skyros, and Vari–Voula–Vouliagmeni contribute 38.01% to the weighted effectiveness of the indicator concerning the creation of employment positions, with the overall weighted effectiveness of the Programme calculated at 100.00%.
- The projects of the the Municipal Water and Sewerage Company of Drama and the Municipalities of Kavala, Agioi Anargyroi–Kamatero, and Skyros contribute 39.56% to the weighted effectiveness of the indicator regarding the reduction of CO_2 emissions. Due to the reduced effectiveness of the projects implemented by the Municipalities of Vari–

Voula–Vouliagmeni and Orestiada, the overall weighted effectiveness of the Programme is calculated at 99.44%.

- The exceptionally high effectiveness of the project implemented by the Municipality of Kavala in terms of cost savings makes a decisive contribution to achieving the Programme's weighted effectiveness, which is calculated at 1,038.00%.
- The projects of the Municipal Water and Sewerage Company of Drama and the Municipalities of Kavala, Agioi Anargyroi–Kamatero, Skyros, and Orestiada contribute 38.09% to the weighted effectiveness of the energy savings indicator. Due to the lower effectiveness of the project implemented by the Municipality of Vari–Voula–Vouliagmeni, the overall weighted effectiveness of the Programme is calculated at 97.69%.
- Regarding the increase in renewable energy production, the exceptionally high effectiveness of the projects implemented by the Municipality of Skyros and the the Municipal Water and Sewerage Company of Drama contributed decisively to achieving the Programme's weighted effectiveness (485.48%).
- The projects implemented by the Municipal Water and Sewerage Company of Drama and the Municipalities of Agioi Anargyroi–Kamatero, Skyros, and Vari–Voula–Vouliagmeni contribute 38.03% to the weighted effectiveness of the indicator regarding the number of individuals reporting having benefited from improved public social infrastructure, with the overall weighted effectiveness of the Programme calculated at 100.01%.

The following table presents the achieved effectiveness indicators for the entire Programme, along with their weighted efficieancy.

Table 6: Programme Effectiveness Indicators (Unweighted, Weighted by Output Contribution and Financial Weighting)

Indicator Number, Title and Unit of Measurement	Unweighted Effectiveness Rate	Weighted Efficiency Rate Based on Output Weighting	Weighted Effectiveness Rate Based on Financial Significance
EOX_R001 Number of jobs created	100,00%	100,00%	100,00%
EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	100,00%	101,71%	99,44%
EOX_R037 Estimated monetary savings in EUR/year	166,62%	1.785,67%	1.038,00%
EOX_R038 Estimated energy savings (in MWh/year)	100,00%	98,36%	97,69%
EOX_R039 Estimated increase in renewable energy production (in MWh/year)	100,00%	448,93%	485,48%
EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	100,00%	100,00%	100,01%

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

Based on the above data, it can be concluded that the effectiveness of the Programme is adequate, as it manages to adequately cover all its objectives, with a noted overachievement of the target related to cost savings. The weighted effectiveness, considering both the significance of outputs and the financial weight, demonstrates an overachievement of targets for cost savings and the increase in renewable energy production, as well as a marginal achievement of the targets for the annual reduction of CO_2 emissions (attributable to the relatively low performance of the Municipalities of Orestiada and Vari – Voula - Vouliagmeni) and the estimated energy savings (due to the low performance of the Municipality of Vari – Voula - Vouliagmeni).

4.2.1.1 Question B.1: To what extent were the priorities and results (outputs and outcomes, cf. Programming Agreement) of the programme achieved with the desired quality (as opposed to quantity)?

Based on the preceding analysis, the achievement of targets has been substantiated for the majority of the Programme's priorities and results (outputs & outcomes), as established in the Programming Agreement.

Overachievement of results was realized in the following areas:

- in the outputs concerning the number of individuals trained in energy efficiency and renewable energy (399.08%), with contributions from all projects;
- in the outcomes relating to cost savings (370.21%), due to the overachievement of targets by the projects of the Municipalities of Kavala, Katerini, Skyros, Vari – Voula - Vouliagmeni and the Municipal Water and Sewerage Company of Drama, energy savings (377.63%), and the number of beneficiaries resulting from the improvement of public social infrastructure (869.01%), with contributions from all projects.

Partial achievement, at a notably high level, was recorded for the output concerning the number of projects involving collaboration with a partner from the Donor States (92.31%), as the Municipality of Moschato - Tavros reported that it did not participate in any event under the EEA Grants with a partner from the Donor States (Achievement Report). Similarly, partial achievement was observed in the outcome related to the reduction of CO_2 emissions (98.18%), due to the partial reduction of the project's scope for the Municipality of Orestiada (non-installation of a photovoltaic system at the building of the First Nursery of Didymoteicho) and a slightly lower reduction of CO_2 emissions than initially estimated for the project of the Municipality of Vari – Voula - Vouliagmeni (according to the Energy Performance Certificates).

Πίνακας 7: Achievement of Targeted Priorities and Results (Outputs & Outcomes) of the Programme Agreement ("GR - Energy" Programme)

A/A	Expected Programme Results	Indicator Number, Title and Unit of Measurement	Target Achievement as Set in the Programme Agreement (Proj. Eff.I)
1	Awareness campaigns on energy efficient technologies / solutions and renewable energy conducted	EOX_O004 Number of awareness raising campaigns carried out (number)	**185,71%**

A/A	Expected Programme Results	Indicator Number, Title and Unit of Measurement	Target Achievement as Set in the Programme Agreement (Proj. Eff.I)
2	Exchange of knowledge between Greece and Donor States	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	**92,31%**
3	Renewable energy capacity installed	EOX_O034 Installed capacity for production of renewable energy (in MW)	**123,79%**
4	Awareness campaigns on energy efficient technologies / solutions and renewable energy conducted	EOX_O039 Number of people reached by awareness campaigns (number)	**169,24%**
5	Public entities supported to deploy innovative green technologies, processes, solutions, products and services	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	**169,23%**
6		EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	**161,54%**
7	Systems for monitoring of energy Consumption implemented	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	**161,54%**
8	Strengthened expert capacity for energy efficiency and renewable energy	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	**399,08%**
9	Awareness campaigns on energy efficient technologies / solutions and renewable energy conducted	EOX_O045 Number of conferences / workshops held related to results from projects (number)	**107,69%**
10		EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	**100,00%**
11	Improved energy efficiency	EOX_R001 Number of jobs created	**144,44%**
12		EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	**98,18%**
13		EOX_R037 Estimated monetary savings in EUR/year	**370,21%**
14		EOX_R038 Estimated energy savings (in MWh/year)	**377,63%**
15		EOX_R039 Estimated increase in renewable energy production (in MWh/year)	**123,50%**
16		EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	**869,01%**
17	Enhanced collaboration between beneficiary and donor state entities involved in the programme	Level of trust between cooperating entities in Beneficiary States and Donor States	**100,00%**
18		Level of satisfaction with the partnership	**100,00%**
19		Share of cooperating organisations that apply the knowledge acquired from bilateral partnership (percentage)	**100,00%**

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports, Indicator Performance Reports and Programme Operator Implementation Report

Consequently, the Programme delivered the desired outcomes, fulfilling all of its priorities:

- Improved energy efficiency
- Exchange of knowledge between Greece and Donor States
- Renewable energy capacity installed
- Systems for monitoring of energy Consumption implemented
- Strengthened expert capacity for energy efficiency and renewable energy
- Awareness campaigns on energy efficient technologies / solutions and renewable energy conducted
- Enhanced collaboration between beneficiary and donor state entities involved in the programme
- Public entities supported to deploy innovative green technologies, processes, solutions, products and services

Regarding the qualitative evaluation of the projects, their implementation was carried out in a timely manner, in accordance with the technical specifications of the respective tenders. Any modifications to the scope of work did not have significant impacts on the achievement of objectives.

The monitoring and handover of works and procurements were completed without any major issues. Furthermore, no problems were identified during the trial operation phase (where applicable), as the projects operated and continue to operate effectively. According to the data provided by the implementing bodies, no major issues arose during the operational phase, either in terms of the quality of materials and construction or the performance of equipment and installations.

Consequently, the Programme's objectives were achieved in the desired quality.

4.2.1.2 Question B.2: Which factors influenced the achievement of these results?

The factors that contributed to the qualitative achievement of the Programme's results are as follows:

- The systematic support provided during the project preparation phase,
- The compliance of the Implementing Bodies with the Management and Control System (MCS) and the procedures for Pre-tender Approval and Pre-contract Approval,
- The clear technical descriptions and specifications of the projects and the equipment to be procured,
- The experience, technical expertise and administrative capacity of the competent services of the beneficiaries,
- The utilisation of external experts and consultants,
- The capacity of the supplier / manufacturer market supported by the general emphasis in recent years on projects improving energy efficiency and the use of renewable energy sources,
- The enhancement of technical know-how among suppliers / manufacturers due to the abundance of similar projects and the high demand for such interventions in both the private and public sectors,

- The parallel harmonisation of the institutional framework in implementation of the National Climate Law and the simultaneous preparation of public bodies (notably local authorities) in accordance with their obligations for the development and implementation of local plans aimed at emission reduction and energy savings,
- The preparation and commencement of implementation of the 2021–2027 Partnership Agreement programmes, which incorporate identical targets and provide substantial funding opportunities for similar projects,
- The systematic groundwork for the design and implementation of the Just Transition Plan, along with the associated publicity and awareness-raising among stakeholders and citizens regarding the objectives of energy policy,
- The availability of complementary financial instruments, notably the Recovery and Resilience Facility (RRF), and the consequent emphasis on initiatives led by private actors and businesses in the fields of energy efficiency upgrades and energy savings.

4.2.1.3 Question B.3 Were there other priorities (outputs) achieved, beyond those specified in the Programme Agreement (Annex: Results Framework), that contributed to the overall results of the Programme? Were any additional outcomes realised beyond those mentioned in the Results Framework that contributed to the Programme's objectives? If so, which ones?

In addition to the measurable results of the Programme reflected in the output and outcome indicators, the implementation of projects and awareness-raising campaigns yielded the following indirect outcomes:

- Improvement of Quality of Life:

  The implemented projects improve the living and working conditions of the users of the upgraded building infrastructure, by providing more optimal working environment and consequently, greater comfort. The comfort of users directly benefits the quality of services provided. Additionally, the reduction in CO_2 emissions improves the environmental indicators of the respective areas.

- Public Awareness:

  The implementation of demonstrative innovative energy efficiency interventions on buildings, facilities and public spaces (e.g., street lighting, etc.) with high visitor traffic, raises awareness among users and visitors of the infrastructure, contributing to the promotion of innovation and best practices in the application of energy technologies, and sustainable development. Through the dissemination of the results of energy upgrading projects, the broader public is indirectly encouraged to take advantage of available funding programmes for improving energy efficiency in residences (the "Exoikonomo" Programme), public buildings (the "Diatyro" Programme for Public Sector), and private buildings of significant architectural value (the "Diatyro" Programme for Private Sector).

4.2.1.4 Question B.4 What is the assessment of the indicator system used in the Results Framework?

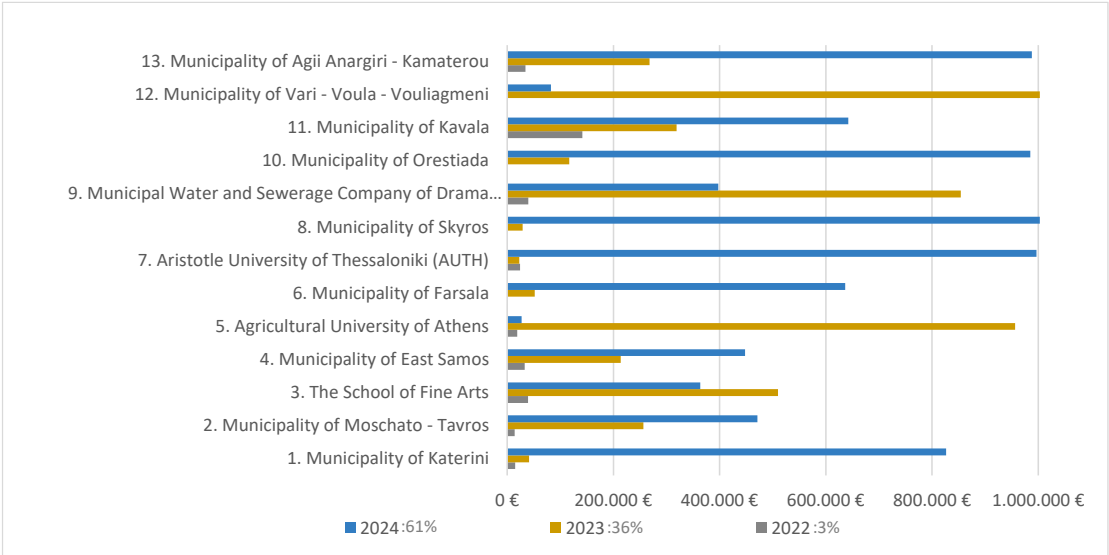
The indicators used in the Results Framework were appropriate for reflecting all outputs and outcomes of the implemented projects and of the Programme as a whole. Both the type of indicators and the methodology applied for the estimation and verification of results are fully aligned with the recommendations of the EEA and Norway Grants guidelines: Core Indicators 2014–2021, Results Guideline, and Results Reporting Guide for the 2014–2021 funding period.

4.2.1.5 Question B.5: How are the actual results assessed in relation to the implementation timeline and the quantified targets achieved at Programme level?

Although the projects were incorporated into the Programme in 2021, the majority of project expenditures (61%) were certified during the final four-month period of eligibility (30/04/2024), as illustrated in the graph below.

This is due to delays in project implementation caused by time-consuming public procurement/contracting procedures (Law No. 4412/2016) in certain cases, and pending approval of the requested additional funding from the EEA Grants, owing to the significant cost escalation of the equipment to be procured (impacts of COVID-19 and conflicts in Ukraine and the Middle East).

Graph 3: Funding Uptake by Programme Projects over the 2022–2024 Eligible Expenditure Period



Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

Despite the challenges encountered, the majority of the projects were successfully completed within the eligibility period, owing to the constructive cooperation and coordinated actions of the Programme Operator (CRES) and the implementing entities / beneficiaries.

Given that the Programme's quantified targets were achieved to a high degree—and in some cases exceeded the initial objectives—the implementation of the Programme is assessed as effective.

In order to estimate the degree of effectiveness with which the Programme achieved its objectives, a scoring assessment was carried out regarding the effectiveness of the thirteen (13) funded projects in meeting their specific targets.

The average rating across all projects reflects the overall effectiveness of the Programme.

The rating range from 1 (minimum) to 5 (maximum), with the following interpretations:

• 1 = The Programme/project did not contribute to the achievement of the expected objectives due to internal factors,

• 2 = The Programme/project contributed minimally to the achievement of the expected objectives due to external factors,

• 3 = The Programme/project contributed partially to the achievement of the expected objectives,

• 4 = The Programme/project contributed to the achievement of the expected objectives with a delay relative to the planned schedule. It was demonstrated to be the best option among all feasible alternatives,

• 5 = The Programme/project contributed to the achievement of the expected objectives according to the planned schedule. It was demonstrated to be the best option among all feasible alternatives.

Table 8: Evaluation of the Effectiveness of Integrated Projects in Achieving the Programme's Objectives

A/A	Project Title	Rating	Description - Analysis
1	Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini (MIS Code: 5075131)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory
2	nZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato – Tavros (MIS Code 5075035)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory

A/A	Project Title	Rating	Description - Analysis
3	Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station (MIS Code: 5074958)	4	The project was implemented in accordance with the planned timeline and within the eligible expenditure period. However, the initially foreseen installation of renewable energy systems (photovoltaic panels) was not carried out. Consequently, the project's effectiveness in achieving the outcome indicator EOX_R039 "Estimated increase in renewable energy production" is zero (0%). Due to its innovative nature, the project is recommended for use in communication and publicity activities by the Donor States and the Financial Mechanism Office (FMO).
4	Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece (MIS Code: 5075132)	4	The Municipality of Eastern Samos failed to implement part of the project within the period of eligibility (ineligible public expenditure: €22,584.28) It is noted that the charging stations were installed without utilising Renewable Energy Sources (RES), despite relevant provisions in the initial design, due to saturation of the local grid and the refusal by DEDDIE (Hellenic Electricity Distribution Network Operator) to issue grid connection terms. Consequently, the project's effectiveness in achieving the target for indicator EOX_R039 'Estimated Increase in Renewable Energy Production' is zero (0%).
5	Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens (MIS Code:5073760)	4	The Agricultural University of Athens failed to implement part of the project within the period of eligibility (ineligible public expenditure: €8,360.28)
6	Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece (MIS Code: 5074843)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory
7	Integration of Innovative Energy Technologies in Central Building Infrastructure of High acessibility of AUTh (MIS Code : 5075027)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory
8	Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros (MIS Code : 5074832)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory

A/A	Project Title	Rating	Description - Analysis
9	Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama (MIS Code 5074878)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory Due to its innovative nature, the project is recommended for use in communication and publicity activities by the Donor States and the Financial Mechanism Office (FMO).
10	Demonstration energy renovation projects of municipal buildings of North Evros (MIS Code : 5074952)	4	The Municipality of Orestiada was unable to implement a portion of the project within the eligible expenditure period, resulting in an ineligible public expenditure of €14,233.47. The project demonstrates reduced effectiveness in achieving the indicators EOX_R010 "Estimated annual reduction of CO_2 emissions" (91.59%) and EOX_R039 "Estimated increase in renewable energy production" (85.59%).
11	Energy Upgrade of Perigialis school buildings of the Municipality of Kavala (MIS Code 5073838)	5	The project was implemented in accordance with the established timeline and within the eligible expenditure period. Its effectiveness in meeting the targeted outcome indicators is deemed satisfactory
12	Energy upgrades and RES installation at public buildings of Vari Voula Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism (MIS Code: 5075038)	4	The project was implemented in accordance with the timetable within the eligible expenditure period; however, it demonstrates reduced effectiveness in achieving the targets for indicators EOX_R010 'Estimated Annual Reduction of CO_2 Emissions' (76.91%) and EOX_R038 'Estimated Energy Savings' (65.97%).
13	Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri (MIS Code: 5074776)	4	The project was implemented in accordance with the timetable within the eligible expenditure period; however, it demonstrates reduced effectiveness in achieving the target for indicator EOX_R037 'Estimated Cost Savings' (78.91%). It is noted that, during the initial planning phase, five (5) buildings were included. However, following a modification request submitted by the beneficiary, the selected buildings were changed. Nevertheless, the revised set of buildings generates an equivalent level of outputs and results.
The Average Rating Across All Projects of the Programme		**4,54**	

Source: Project Completion Reports and Indicator Performance Reports (CRES)

Most projects were implemented according to schedule within the eligibility period of expenditures, successfully meeting the targets of the outcome indicators. However, in the projects of the Athens School of Fine Arts and the Municipality of Eastern Samos, the installation of renewable energy sources (photovoltaic systems) was not completed, resulting in an effectiveness score of zero (0) for the objective of increasing renewable energy production.

The projects of the Municipalities of Orestiada, Vari – Voula – Vouliagmeni, and Agii Anargyri – Kamatero demonstrate reduced effectiveness in achieving the indicators related to CO_2 emission reductions, increased renewable energy production, energy savings, and cost savings.

Furthermore, the Municipalities of Eastern Samos, Orestiada and the Agricultural University of Athens failed to complete a small portion of their projects within the eligibility period for expenditure, rendering part of the public expenditure ineligible.

The average rating of the implemented projects under the programme is 4.54 (rounded to 5); consequently, the programme effectively meets its objectives. The programme contributed to the achievement of the expected targets according to the planned schedule. It was demonstrated to be the best option among all feasible alternatives.

4.2.2 Final Evaluation of the Programme's "Effectiveness"

The effectiveness of the Programme is assessed as adequate, given that, during its implementation, most targets were exceeded in terms of outputs and outcomes, both in relation to the objectives set out in the Programming Agreement and those defined upon the inclusion of projects within the Programme.

The Programme delivered the desired outcomes, fulfilling all of its priorities:

- Improved energy efficiency
- Exchange of knowledge between Greece and Donor States
- Renewable energy capacity installed
- Systems for monitoring of energy Consumption implemented
- Strengthened expert capacity for energy efficiency and renewable energy
- Awareness campaigns on energy efficient technologies / solutions and renewable energy conducted
- Enhanced collaboration between beneficiary and donor state entities involved in the programme
- Public entities supported to deploy innovative green technologies, processes, solutions, products and services

Most projects were implemented according to schedule within the eligibility period of expenditures and demonstrate high quality of final outcomes.

A combined evaluation of the projects in terms of their achievement of objectives and their contribution to the attained outputs of the Programme indicates that the projects of the Municipalities of Katerini, Kavala, Farsala, and Skyros exhibit the highest degree of effectiveness within the Programme as a whole.

4.3 Efficiency

The sufficiency and efficiency of allocated resources are being examined, along with their proportionality to implementation progress and results achievement. The Programme's absorption capacity is assessed by comparing the amounts committed versus those allocated, as well as the amounts disbursed in comparison to those contracted.

4.3.1 Assessment of Sufficiency and Efficiency of Available Financial Resources

During the implementation period of the Programme, a significant increase was observed in the prices of the technical equipment and materials which were to be procured across all projects. This problem resulted from the energy crisis, COVID-19 pandemic and military conflicts in Ukraine and the Middle East.

Despite the increase in available EEA Grants funding (to €14,627,161.34) following relevant requests by project beneficiaries and the Programme Operator, the additional resources proved insufficient to cover all beneficiaries' financial needs.

As evidenced by the responses to the Programme evaluation questionnaire (Question B.2 – Annex 6.2) and the Project Completion Technical Reports, additional financial resources amounting to €320,285.80, in the form of private contribution, were required by the Municipalities of Kavala and Vari – Voula – Vouliagmeni in order to successfully complete their projects.

The Municipality of Orestiada was compelled to amend the scope of its project. Due to delays in the tendering procedures while awaiting additional funding from the EEA Grants, a small part of the physical scope of the projects of the Agricultural University of Athens and the Municipalities of Eastern Samos and Orestiada was not completed within the eligibility period of the actions. As a result, the non-eligible public expenditure of the Programme is estimated at €45,178.03. The final eligible expenditure for the projects under the Programme is estimated at €13,181,885.65.

Table 9: Total Project Cost under the Programme (Eligible Public Expenditure, Non-eligible Public Expenditure, Private Contribution)

Beneficiary	Inclusion Budget (€) (A)	Eligible Public Expenditure (€) (B)	Non-Eligible Public Expenditure (€) (C)	Public Expenditure (€) (D)=(B)+(C)	Private Contribution (E)	Συνολικό Κόστος (F)=(D)+(E)
1. Municipality of Katerini	959.649,44 €	882.642,08 €	0,00 €	882.642,08 €	0,00 €	882.642,08 €
2. Municipality of Moschato - Tavros	831.244,45 €	741.341,68 €	0,00 €	741.341,68 €	0,00 €	741.341,68 €
3. The School of Fine Arts	1.266.239,15 €	912.869,58 €	0,00 €	912.869,58 €	0,00 €	912.869,58 €
4. Municipality of East Samos	749.593,78 €	694.969,24 €	22.584,28 €	717.553,52 €	0,00 €	717.553,52 €
5. Agricultural University of Athens	1.044.349,31 €	1.002.568,30 €	8.360,28 €	1.010.928,58 €	0,00 €	1.010.928,58 €
6. Municipality of Farsala	968.458,23 €	688.161,79 €	0,00 €	688.161,79 €	0,00 €	688.161,79 €
7. Aristotle University of Thessaloniki (AUTH)	1.078.229,25 €	1.043.993,86 €	0,00 €	1.043.993,86 €	0,00 €	1.043.993,86 €
8. Municipality of Skyros	1.237.027,83 €	1.235.611,66 €	0,00 €	1.235.611,66 €	0,00 €	1.235.611,66 €
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	1.295.770,69 €	1.291.274,01 €	0,00 €	1.291.274,01 €	0,00 €	1.291.274,01 €
10. Municipality of Orestiada	1.300.000,00 €	1.101.851,49 €	14.233,47 €	1.116.084,96 €	0,00 €	1.116.084,96 €
11. Municipality of Kavala	1.299.638,22 €	1.102.658,85 €	0,00 €	1.102.658,85 €	161.069,06 €	1.263.727,91 €
12. Municipality of Vari Voula Vouliagmeni	1.296.961,00 €	1.193.247,18 €	0,00 €	1.193.247,18 €	159.216,74 €	1.352.463,92 €
13. Municipality of Agii Anargiri - Kamaterou	1.299.999,99 €	1.290.695,93 €	0,00 €	1.290.695,93 €	0,00 €	1.290.695,93 €
Total Cost (Programme)	**14.627.161,34 €**	**13.181.885,65 €**	**45.178,03 €**	**13.227.063,68 €**	**320.285,80 €**	**13.547.349,48 €**

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

The efficiency of a project is expressed as the ratio of its physical to its financial completion, and the efficiency indicator of a project is equal to:

Project Efficiency Index (Proj. E.I.) = Project Effectiveness Index (Proj. Eff.I) / Absorption Rate (Financial Completion Index)

The aggregation from project level to Programme level is carried out using a process similar to that described for the calculation of the corresponding effectiveness indices (Chapter 4.2). Specifically, the Efficiency Index of each project is multiplied by its weighting factor. The result yields the weighted Efficiency Index of the project. The sum of the weighted indices of all projects constitutes the Efficiency Index of the Programme:

Programme Efficiency Index (Prog. E.I.) = Σ (Proj. Eff.I.)Proj x (W) Proj.

όπου:

- E.I.= Efficiency Index
- W= Weighting Factor
- Proj = Project
- Prog. = Programme

As with the assessment of the Programme's Effectiveness Index, the weighting factor is estimated using two approaches:

a) Based on outputs, representing each project's contribution to the total outputs achieved across all projects per output indicator (i.e. according to the Project Contribution Rate to Achieved Outputs);

b) Based on the financial weight of each project: the financial weighting factor is calculated on the basis of the final financial scope (final expenditure) of each individual project within the Programme.

The assessment of the efficiency of the resources used and their proportionality in relation to the results achieved requires the evaluation of the degree of financial completion, that is, the absorption rate of available resources by the Programme's projects. The degree of financial completion of the projects was calculated in Chapter 4.2 and ranges between 71.06% and 99.89%, while for the Programme as a whole it is estimated at 90.12%.

The following table presents the efficiency of the projects in terms of achieving the intended results, taking into account their level of financial completion.

Table 10: Efficiency Index (E.I.) of Projects and Programme (Effectiveness Index / Financial Completion Index)

Beneficiaries	Efficiency Index (E.I.) of Projects and Programme						
	Financial Completion Rate of Projects	EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
1. Municipality of Katerini	91,98%	108,72%	108,72%	181,16%	108,72%	108,72%	108,72%
2. Municipality of Moschato - Tavros	89,18%	112,13%	112,13%	112,13%	112,13%	112,13%	112,13%

Beneficiaries	Efficiency Index (E.I.) of Projects and Programme						
	Financial Completion Rate of Projects	EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
3. The School of Fine Arts	72,09%	138,71%	138,71%	138,71%	138,71%	0,00%	138,71%
4. Municipality of East Samos	92,71%	107,86%	107,86%	107,86%	107,86%	0,00%	107,86%
5. Agricultural University of Athens	96,00%	104,17%	104,17%	104,17%	104,17%	104,17%	104,17%
6. Municipality of Farsala	71,06%	140,73%	140,73%	140,73%	140,73%	140,73%	140,73%
7. Aristotle University of Thessaloniki (AUTH)	96,82%	103,28%	103,28%	103,28%	103,28%	103,28%	103,28%
8. Municipality of Skyros	99,89%	100,11%	100,11%	162,60%	100,11%	2.778,18%	100,11%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	99,65%	100,35%	101,35%	118,07%	100,48%	1.615,61%	100,35%
10. Municipality of Orestiada	84,76%	117,98%	108,06%	117,98%	128,63%	100,98%	117,98%
11. Municipality of Kavala	84,84%	117,86%	148,00%	13.145,06%	117,86%	117,86%	117,86%
12. Municipality of Vari Voula Vouliagmeni	92,00%	108,69%	83,59%	150,31%	71,71%	111,38%	108,86%
13. Municipality of Agii Anargiri - Kamaterou	99,28%	100,72%	100,72%	79,48%	100,72%	100,72%	100,72%
Programme Efficiency Index (Prog. E.I.)	**90,12%**	**110,96%**	**111,53%**	**168,03%**	**108,00%**	**125,46%**	**110,97%**

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

Given that the overall absorption of financial resources at Programme level amounts to 90.12%, the following were achieved:

- 100.00% of the total targets of the Programme's projects for job creation (Efficiency: 110.96%),
- 100.51% of the total targets of the Programme's projects for CO2 emission reduction (Efficiency: 111.53%),
- 151.43% of the total targets of the Programme's projects for Cost Savings (Efficiency: 168.03%),
- 97.33% of the total targets of the Programme's projects for energy savings (Efficiency: 108.00%),
- 113.07% of the total targets of the Programme's projects for increased renewable energy production (Efficiency: 125.46%),
- 100.00% of the total targets of the Programme's projects for the number of individuals reporting benefit from the improvement of public social infrastructure (Efficiency: 110.97%).

The following section examines each project individually in order to assess the efficiency of the resources employed and their proportionality in relation to the outputs achieved. Given that the majority of projects have succeeded in exceeding their targeted outputs, it is reasonable to conclude that the highest efficiency is demonstrated by those projects which have attained this result through the utilisation of the least possible financial resources.

Accordingly, without applying any form of weighting, the projects undertaken by the Municipality of Farsala and the Athens School of Fine Arts — as those exhibiting the lowest degree of resource absorption while having exceeded their targeted objectives (with the exception of the increase in renewable energy production in the case of the Athens School of Fine Arts) — demonstrate the highest efficiency rates in the utilisation of financial resources across outcome indicators related to job creation, CO_2 emission reductions, energy savings, and beneficiaries of improvements in public social infrastructure.

High efficiency is also demonstrated by the projects with the next lowest levels of resource absorption, notably those of the Municipality of Kavala, owing to the substantial overachievement of the cost-saving target (13,145.06%) and significant attainment of the CO_2 emission reduction target (148.00%), as well as those of the Municipality of Orestiada, due to the high achievement of the energy-saving target (128.63%).

With regard to the objective of increasing renewable energy production, the projects of the Municipality of Skyros (2,778.18%) and the Municipal Water and Sewerage Company of Drama (1,615.61%) demonstrate the highest efficiency in the utilisation of financial resources, attributable to the substantial overachievement of their respective targets.

As with the effectiveness assessment, a reliable evaluation of the Programme's efficiency requires weighting the efficiency levels of individual projects according to their relative contribution to the Programme's total outputs.

Furthermore, weighting projects according to their financial contribution adds another critical dimension to assessing the Programme’s overall efficiency. Detailed weighted efficiency tables for both individual projects and the Programme as a whole – based on output indicator achievement and financial weighting are provided in Annexes 6.3.1.8 and 6.3.1.9.

With regard to the weighting of the efficiency of the financial resources utilised, based on the relative significance of outputs across the projects, the following observations are made:

- The relative weight (30.77%) of the projects implemented by the Municipalities of Vari – Voula – Vouliagmeni and Agii Anargyri – Kamatero in terms of outputs related to job creation contributes significantly (32.22%) to the achievement of the Programme’s weighted efficiency for this specific output indicator, which stands at 112.13%.
- The increased weight (55.00%) of the projects undertaken by the Municipalities of Katerini, Skyros, and Kavala in relation to the outputs of the annual CO_2 emissions reduction indicator, combined with the high efficiency of the Skyros project, contributes substantially (63.87%) to the achievement of the Programme’s weighted efficiency, which is calculated at 112.77%.
- The projects with the highest weight (53.50%) in terms of cost-saving outputs (Municipalities of Katerini and Kavala), in combination with the exceptionally high efficiency of the Kavala project, played a decisive role in achieving the Programme’s weighted efficiency for this indicator (2,096.27%).

- The weight of the projects implemented by the Municipalities of Katerini and Kavala contributes 44.51% to the achievement of the Programme's overall weighted efficiency, which is estimated at 111.64%.
- With regard to the increase in renewable energy production, the exceptionally high efficiency of the projects of the Municipality of Skyros and the Municipal Water and Sewerage Company of Drama was instrumental in achieving the Programme's weighted efficiency for this indicator (465.27%).
- The increased weight (74.55%) of the projects carried out by the Municipalities of Moschato – Tavros, Farsala, Katerini, and the Agricultural University of Athens, in relation to the number of individuals reporting benefits from improved public social infrastructure, contributes significantly (74.55%) to the achievement of the Programme's weighted efficiency, which stands at 117.04%.

With regard to the weighting of the efficiency of the financial instruments utilised, based on their financial significance within the projects, the following observations are made:

- Despite the relatively homogeneous distribution of financial significance among the projects within the Programme, the projects of the Municipal Water and Sewerage Company of Drama and the Municipalities of Agii Anargyri – Kamatero, Skyros, and Vari – Voula – Vouliagmeni account for 38.01% of the Programme's eligible public expenditure.
- The contribution of the projects to the weighted efficiency of the indicator for job creation is relatively uniform, with the Programme's weighted efficiency calculated at 110.96%.
- The projects of DEYA Drama and the Municipalities of Kavala, Agii Anargyri – Kamatero, and Skyros contribute 41.55% to the weighted efficiency of the indicator for CO_2 emissions reduction, with the Programme's weighted efficiency calculated at 110.48%.
- The exceptionally high efficiency of the Municipality of Kavala's project in terms of cost savings is a decisive factor in achieving the Programme's weighted efficiency, which is calculated at 1,214.81%.
- The projects of DEYA Drama and the Municipalities of Orestiada, Kavala, Agii Anargyri – Kamatero, and Skyros contribute 49.70% to the weighted efficiency of the energy savings indicator, with the Programme's weighted efficiency calculated at 108.52%.
- With regard to the increase in renewable energy production, the exceptionally high efficiency of the projects of the Municipality of Skyros and DEYA Drama contributed decisively to the achievement of the Programme's weighted efficiency (493.96%).
- The contribution of the projects to the weighted efficiency of the indicator for beneficiaries from the improvement of public social infrastructure is relatively homogeneous, with the Programme's weighted efficiency calculated at 110.98%.

The table below presents the efficiency indicators achieved for the entirety of the Programme, as well as their respective weightings.

Table 11: Programme Efficiency Indicators (Non weighted, Weighted by Output Significance and Financial Significance)

Indicator Number, Title and Unit of Measurement	Efficiency Rate (Non weighted)	Weighted Efficiency Rate Based on Output Significance	Weighted Efficiency Rate Based on Financial Significance
EOX_R001 Number of jobs created	110,96%	112,13%	110,96%
EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	111,53%	112,77%	110,48%
EOX_R037 Estimated monetary savings in EUR/year	168,03%	2.096,27%	1.214,81%
EOX_R038 Estimated energy savings (in MWh/year)	108,00%	111,64%	108,52%
EOX_R039 Estimated increase in renewable energy production (in MWh/year)	125,46%	465,27%	493,96%
EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	110,97%	117,04%	110,98%

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

Based on the above data, it can be concluded that the Programme demonstrates a high level of efficiency in the utilisation of financial resources, as it effectively meets the entirety of its objectives. Moreover, there is an overachievement of the target related to cost savings. The weighted efficiency—both in terms of output significance and financial significance—indicates an overachievement of targets in the fields of cost savings and the increase in renewable energy production.

Subsequently, the unit costs of CO_2 Emission Reduction, Energy Savings, and Increased Renewable Energy Production are calculated and analysed at both project and Programme level.

The unit cost is calculated using the following formula:

Unit Cost = Eligible Public Expenditure of the Project / (Physical Implementation × Project Lifetime

It should be noted that the project lifetimes were determined in accordance with the responses provided by the implementing bodies to Question E.2 of the Programme Evaluation Questionnaire – Annex 6.2.

A detailed calculation table is provided in Annex 6.3.1.10.

Table 12: Unit Costs for CO_2 Emissions Reduction, Energy Savings and Increase in Renewable Energy Production

Δικαιούχος Φορέας	Project Lifetime (according to beneficiaries)	Unit Costs		
		€/tonne CO_2	Energy Savings (€/MWh)	Increase in Renewable Energy Production (€/MWh)
1. Municipality of Katerini	10,00	69,83	21,12 €	12.609,17 €
2. Municipality of Moschato - Tavros	15,00	189,36	64,02 €	3.088,92 €
3. The School of Fine Arts	10,00	276,63	80,01 €	-
4. Municipality of East Samos	10,00	847,52	97,33 €	-
5. Agricultural University of Athens	15,00	215,61	63,72 €	1.028,28 €
6. Municipality of Farsala	10,00	839,22	80,58 €	267,77 €
7. Aristotle University of Thessaloniki (AUTH)	10,00	410,92	125,63 €	14.301,29 €
8. Municipality of Skyros	17,00	103,68	101,37 €	654,80 €
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	17,00	250,68	101,14 €	471,78 €
10. Municipality of Orestiada	15,00	471,78	103,66 €	504,86 €
11. Municipality of Kavala	10,00	170,85	40,76 €	241,81 €
12. Municipality of Vari Voula Vouliagmeni	10,00	373,86	127,29 €	417,37 €
13. Municipality of Agii Anargiri - Kamaterou	10,00	3.317,98	1.199,53 €	4.033,42 €
Programme Total	**12,23 (average)**	**227,08**	**69,68 €**	**698,17 €**

Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme, Project Completion Reports and Indicator Performance Reports

The data analysis reveals significant variation in unit costs across individual projects. For the Programme as a whole, the unit costs are calculated at €227.08 per tonne of reduced CO_2 emissions, €69.68 per MWh of saved energy and €698.17 per MWh of increased energy production. Given the typology of the projects and their innovative and demonstrative nature, the unit costs are deemed acceptable for the majority of the projects and for the Programme overall.

The unit cost threshold of €150 per tonne of CO_2, as set out in the Blue Book as a desirable target for energy efficiency projects, is considered particularly low and practically unachievable.

However, if the unit cost of each project is calculated based on the standard operational lifespan of the interventions—20 years (with typical lifespans ranging from 20 to 30 years for energy efficiency measures such as thermal insulation, window frames, glazing, and heat pumps/air conditioning units, and 25 to 30 years for photovoltaic panels)—then the unit costs for the Programme as a whole are estimated at €138.87 per tonne of reduced CO_2 emissions (within the desirable threshold), €42.61 per MWh of saved energy and €426.96 per MWh of increased renewable energy production.

4.3.1.1 Question C.1 How is the initial development phase of the Programme assessed in terms of its reasonable and feasible targeting? Were there any delays and/or other difficulties encountered during the implementation of the Programme and the projects? Could these have been avoided or mitigated?

The objectives of the Programme, as set out in the Programme Agreement, are assessed as reasonable and achievable, as they address the identified needs within the relevant policy areas (energy efficiency and renewable energy sources) and reflect the full range of intended final outcomes. The Programme succeeded in effectively and efficiently meeting all of its established objectives, particularly in terms of the utilisation of financial resources.

According to the responses provided by the implementing bodies in the Programme evaluation questionnaire (Question B.3 – Annex 6.2) and the Indicator Performance Reports, the main difficulties encountered by project implementers were primarily due to unpredictable factors. Most issues had limited impact on Programme implementation as they were effectively addressed through the expertise of the technical services of the implementing bodies:

- Change of Implementing Body (Beneficiary) due to modifications in the regulatory framework and the abolition of Municipal Legal Entities (Municipality of Katerini).
- Lengthy procedures for the granting of renewable energy connection permits by the Hellenic Electricity Distribution Network Operator (HEDNO), including cases of refusal owing to saturation of local networks (Municipality of Eastern Samos), as well as significant delays in responding to other requests (e.g., requests for power increase in buildings for heat pumps and the interconnection of photovoltaic systems – Municipality of Agioi Anargyroi–Kamatero).
- Delays in procurement/tendering procedures due to pre-contractual appeals during the bidding process.
- Limited project implementation timeframe for school buildings, as works had to be carried out outside the academic period (a significantly restrictive factor).
- Postponement of delivery deadlines for certain projects due to delays not attributable to the contractors (Aristotle University of Thessaloniki).

The most significant issue that arose, which was crucial to the implementation of the Programme, was the escalation in the cost of technical equipment and materials for all projects. This increase was a direct consequence of the energy crisis, the COVID-19 pandemic, and the geopolitical conflicts in Ukraine and the Middle East.

The Programme Operator (CRES) expressed concerns to the National Contact Point (NCP) given that the majority of the Programme involved “construction works for energy upgrades.” These significant cost increases were expected to result in a substantial portion of the physical scope—approximately 35%—being unable to be contracted (13/07/2022).

The Programme Operator submitted detailed documentation to the Programme Officer at the Financial Mechanism Office (FMO) regarding the additional amount required for the Projects in order to ensure the achievement of the targets and indicators (22/09/2022).

The issue was also raised with the Embassy of the Kingdom of Norway (the principal financier of the EEA Financial Mechanism) and was subsequently discussed during the Annual Meeting of the EEA Financial Mechanism (16/11/2022).

On 20 December 2022, the Programme Operator was informed by the Financial Mechanism Office (FMO) via electronic correspondence that additional funding would be provided due to an unallocated balance from another EEA Financial Mechanism Programme. However, neither the amount of the funding nor the timeframe for its allocation was specified.

During the same period, the Implementing Bodies sought updates from the Programme Operator regarding the progress of their requests for an increase in the project budgets in order to achieve the binding targets and indicators. There was a pressing need to tender the construction sub-projects to enable their completion by the Programme's final implementation deadline (30 April 2024).

On 21 March 2023, the Programme Operator was informed by the National Contact Point (NCP) of the final amount of additional funding to be approved and proceeded with the allocation of the additional funds among the approved Actions of the Programme, with the Financial Mechanism Office (FMO) duly notified.

In coordination with the National Contact Point (NCP), in April 2023, amendments were made to the Decisions of Approval for those Actions meeting the criteria to receive additional funding. To avoid delays in the tendering process while awaiting the supplementary financing, the Programme Operator proceeded with the segregation of the physical scope of the projects requiring additional funding by creating a separate sub-project for the remaining physical scope that could not be tendered due to price increases.

On 6 June 2023, the Memorandum of Understanding (MoU) of the EEA Financial Mechanism 2014–2021 was communicated to the Programme Operator by the Financial Mechanism Office (FMO). A few days later, the latest version of the Programme Agreement was uploaded onto the GRACE platform.

On 27 September 2023, Decision No. 82773 (Government Gazette No. 5671) was published, amending Decision No. 22869/26.02.2020 concerning the co-financing of the programme entitled "Renewable Energy Sources, Energy Efficiency" (Programme GR-Energy), with the Centre for Renewable Energy Sources and Savings (CRES) as the Programme Operator, funded by the European Economic Area Financial Mechanism (EEA FM) 2014–2021 and National Resources of the Public Investment Programme (PIP) (Government Gazette B' 974).

The issue was addressed owing to the highly effective cooperation between the Programme Operator, the Implementing Bodies, the National Contact Point (NCP), and the Financial Mechanism Office (FMO).

Given that most difficulties were attributable to unforeseeable factors and could not have been avoided, an extension of the Programme's implementation period could nonetheless have served as a useful mitigating measure.

4.3.1.2 Question C.2 To what extent has the Programme delivered results in accordance with the programming of the Results Framework, in a financially proportionate and timely manner? How is the allocation of resources per priority assessed, as well as the absorption of the total budget per project by the end of the funding period, supported by substantiated quantification?

Given that the majority of projects were successfully completed within the eligibility period of expenditures (with minor deviations in projects of the Municipalities of Eastern Samos and Orestiada, the Agricultural University of Athens, and the Athens School of Fine Arts), and that the efficiency indicators of the resources utilised in relation to the results are deemed adequate, it is assessed that the Programme demonstrates a high level of efficiency.

The projects exhibit a high degree of financial completion (ranging from 71.06% to 99.89%), as does the Programme overall (90.12%).

Table 13: Degree of Financial Completion of the Projects and the Programme as whole

Beneficiary	Inclusion Budget (€) (A)	Eligible Public Expenditure (€) (B)	Degree of Financial Completion of the Projects (C)= (B)/(A)
1. Municipality of Katerini	959.649,44	882.642,08	91,98%
2. Municipality of Moschato - Tavros	831.244,45	741.341,68	89,18%
3. The School of Fine Arts	1.266.239,15	912.869,58	72,09%
4. Municipality of East Samos	749.593,78	694.969,24	92,71%
5. Agricultural University of Athens	1.044.349,31	1.002.568,30	96,00%
6. Municipality of Farsala	968.458,23	688.161,79	71,06%
7. Aristotle University of Thessaloniki (AUTH)	1.078.229,25	1.043.993,86	96,82%
8. Municipality of Skyros	1.237.027,83	1.235.611,66	99,89%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	1.295.770,69	1.291.274,01	99,65%
10. Municipality of Orestiada	1.300.000,00	1.101.851,49	84,76%
11. Municipality of Kavala	1.299.638,22	1.102.658,85	84,84%
12. Municipality of Vari Voula Vouliagmeni	1.296.961,00	1.193.247,18	92,00%
13. Municipality of Agii Anargiri - Kamaterou	1.299.999,99	1.290.695,93	99,28%
Total	**14.627.161,34**	**13.181.885,65**	**90,12%**

Source: Project Completion Reports and Indicator Performance Reports

For the majority of projects, as well as for the Programme overall, the unit costs per targeted result are reasonable and acceptable.

For the final assessment of the efficiency of the projects and the Programme, a scoring of the efficiency of the utilised resources and their proportionality to the achieved results is conducted.

Ratings range from 1 (minimum) to 5 (maximum), with the following interpretation:

- 1 = Low efficiency of financial resources with negligible contribution to the overall performance of the Programme,
- 2 = Moderate efficiency of financial resources with negligible contribution to the overall performance of the Programme,
- 3 = Moderate efficiency of financial resources with moderate contribution to the overall performance of the Programme,
- 4 = Adequate efficiency of financial resources contributing positively to the overall performance of the Programme,
- 5 = Exceptionally high efficiency of financial resources contributing positively to the overall performance of the Programme.

Table 14: Evaluation of the Efficiency of Utilised Resources and their Proportionality to the Achieved Results for the Approved Projects and the Programme as a Whole

S/N	Project Title	Rating	Description – Analysis
1	Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini (MIS Code: 5075131)	5	Very high degree of financial completion of the project (91.98%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥108.72% for the outcome indicators).
2	nZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato – Tavros (MIS Code 5075035)	4	High degree of financial completion of the project (89.18%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥112.13% for the outcome indicators).
3	Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station (MIS Code: 5074958)	5	Adequate degree of financial completion of the project (72,09%). High efficiency of the resources utilised and their proportionality to the achieved results (≥138.71% for the majority of outcome indicators), with the exception of result indicator EOX_R039 "Estimated increase in renewable energy production" (0%), as the originally planned RES (photovoltaic) installation was not implemented. Due to its innovative character, the project is proposed for use in communication and publicity activities by the Donor States and the Financial Mechanism Office (FMO).
4	Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece (MIS Code: 5075132)	4	Very high degree of financial completion of the project (92.71%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥107.86% for the majority of outcome indicators), with the exception of result indicator EOX_R039 “Estimated increase in renewable energy production” (0%), as the charging stations were installed without the use of renewable energy sources—despite the relevant provision in the initial planning—due to saturation of the local grid and the refusal of the Hellenic Electricity Distribution Network Operator (HEDNO) to grant connection terms.
5	Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens (MIS Code:5073760)	5	Very high degree of financial completion of the project (96.00%). High efficiency of the resources utilised and their proportionality to the achieved results (≥140.73% for the outcome indicators).

S/N	Project Title	Rating	Description – Analysis
6	Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece (MIS Code: 5074843)	4	Adequate degree of financial completion of the project (71.06%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥104.17% for the outcome indicators).
7	Integration of Innovative Energy Technologies in Central Building Infrastructure of High acessibility of AUTh (MIS Code : 5075027)	5	Very high degree of financial completion of the project (96.82%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥103.28% for the outcome indicators).
8	Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros (MIS Code : 5074832)	5	Very high degree of financial completion of the project (99,89%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥100.11% for the outcome indicators).
9	Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama (MIS Code 5074878)	5	Very high degree of financial completion of the project (99,65%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥100,35% for the majority of outcome indicators) and particularly high for indicator EOX_R039, Estimated Increase in Renewable Energy Production (1,615.61%). Due to its innovative nature, the project is recommended for use in communication and publicity activities by the Donor States and the Financial Mechanism Office (FMO).
10	Demonstration energy renovation projects of municipal buildings of North Evros (MIS Code : 5074952)	4	High degree of financial completion of the project (84.76%). High efficiency of the resources utilised and their proportionality to the achieved results (≥108.06% for the outcome indicators).
11	Energy Upgrade of Perigialis school buildings of the Municipality of Kavala (MIS Code 5073838)	5	High degree of financial completion of the project (84.84%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥117.86% for the majority of outcome indicators) and particularly high for indicators EOX_R010, Estimated Annual Reduction of CO_2 Emissions (148.00%), and EOX_R037, Estimated Cost Savings (13,145.06%).
12	Energy upgrades and RES installation at public buildings of Vari Voula Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism (MIS Code: 5075038)	4	Very high degree of financial completion of the project (92.00%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥108.69% for the majority of outcome indicators) with the exception of indicators EOX_R010, "Estimated Annual Reduction of CO_2 Emissions" (83.59%), and EOX_R038, "Estimated Energy Savings" (71.71%).
13	Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri (MIS Code: 5074776)	4	Very high degree of financial completion of the project (99.28%). Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥100.72% for the majority of outcome indicators) with the exception of indicator EOX_R037 "Estimated Cost Savings" (79.48%).

S/N	Project Title	Rating	Description – Analysis
-	**Programme "Renewable Energy, Energy Efficiency" (Programme GR - Energy)**	5	The Programme demonstrates a very high degree of financial completion (90.12%), Adequate efficiency of the resources utilised and their proportionality to the achieved results (≥108.00% for the majority of outcome indicators) and particularly high efficiency for indicator EOX_R037 Estimated Cost Savings (168.03%).

Source: Project Completion Reports and Indicator Performance Reports (CRES)

Most projects demonstrate a high degree of financial completion, strong efficiency of the resources utilised and proportionality to the achieved results. The same applies to the Programme as a whole, with its financial completion rate calculated at 90.12%, while the efficiency of the outcome indicators ranges between 110.96% and 168.03%.

4.3.2 Final Evaluation of the Programme's "Efficiency"

Based on the preceding analysis, the majority of projects were successfully completed within the eligible expenditure period. Due to a significant increase in equipment prices (an unforeseen factor) during the implementation of the Programme, additional funding from the EEA Financial Mechanism was required. However, this funding proved insufficient to meet the needs of all beneficiaries, resulting in the Municipalities of Kavala and Vari – Voula – Vouliagmeni contributing an amount of €320,285.80 in the form of private financing to ensure the successful completion of their respective projects.

The Municipality of Orestiada was compelled to amend the physical scope of its project without materially affecting the intended outcomes. Due to delays in the procurement procedures, pending the additional funding from the EEA Financial Mechanism, a portion of the physical scope of the projects of the Agricultural University of Athens and the Municipalities of Eastern Samos and Orestiada was not completed within the eligibility period, resulting in a total ineligible public expenditure of €45,178.03.

The challenges and difficulties encountered during the implementation of the Programme were primarily attributable to unforeseen factors and could not have been avoided. Nevertheless, they were addressed effectively, owing to the expertise of the technical services of the project implementing bodies and the highly efficient cooperation between the Programme Operator, the project implementing bodies, the National Contact Point (NCP), and the Financial Mechanism Office (FMO). It should be noted that an extension of the Programme's implementation period could have been beneficial and contributed to the improvement of the final outcome.

The final eligible expenditure of the Programme's projects is estimated at €13,181,885.65. The projects demonstrate a high degree of financial completion, ranging from 71.06% to 99.89%, with the Programme as a whole achieving a financial completion rate of 90.12%.

Given the typology of the projects and their innovative and demonstrative nature, the unit costs are reasonable and acceptable for the majority of projects as well as for the Programme as a whole.

The efficiency of the Programme in utilising financial resources is notably high, as it manages to sufficiently meet all of its objectives, while exceeding the target for cost savings. The weighted efficiency, taking into account the significance of outputs and financial weighting, indicates an overachievement of targets regarding both cost savings and the increase in renewable energy production.

4.4 Cohesion

The compatibility, synergy and complementarity of the programme and its projects with national and European policies and funding instruments are examined and analysed.

4.4.1 Assessment of the Compatibility, Synergy, and Complementarity of the Programme with National and European Policies and Funding

4.4.1.1 Question D.1: Is the programme design aligned with European and national policies?

The Programme design is in full compliance with national and European policies, as the targeted outcomes contribute to achieving the climate objectives of the revised National Energy and Climate Plan (NECP), which is fully aligned with the European Union's policies and commitments regarding environmental, energy, and climate targets for 2030.

4.4.1.2 Question D.2: Is there complementarity with other programmes and projects funded by European funds or other sources? Are overlaps avoided? If so, how?

The "Renewable Energy Sources, Energy Efficiency (Programme GR - Energy)" demonstrates synergies and complementarity with interventions implemented under the following development programmes:

- Environment and Climate Change Programme 2021–2027
- Just Transition Development Programme 2021-2027
- National Recovery and Resilience Plan "Greece 2.0"
- National Development Programme (NDP) and Regional Development Programmes (RDPs) 2021 – 2025

Overlaps between the Programme and other development initiatives and programmes in the field of energy efficiency and renewable energy sources (RES) utilization were avoided, as the Programme's design involved extensive consultations with the competent ministries and 'institutionally significant' entities/organizations operating in the sectors of RES and Energy Efficiency. he Programme's targeting is highly specific as it concerns the implementation of innovative demonstration projects aimed at promoting energy efficiency interventions and RES utilization through tangible results and publicity actions.

Finally, under Call for Proposals No. 1097/CRES/22.07.2020 (ADA: 6Ξ8Ξ469HKM-4ΛΔ), issued by the Programme Operator, applicants were required to submit a declaration certifying the absence of double funding for the proposed expenditure.

4.4.1.2.1 Environment and Climate Change Programme 2021–2027

The "Environment and Climate Change" Programme was approved by the European Commission on 26/08/2022 and constitutes the main Sectoral Programme of the National Strategic Reference Framework (NSRF) for implementing the country's development strategy in the key thematic areas of Energy, Climate Change Adaptation, Urban Environment, Circular Economy – Waste Management, Water and Wastewater Management, and Biodiversity Protection for the Programming Period 2021-2027.

The Programme has a total budget of EUR 3.6 billion in terms of public expenditure and is co-financed by the European Regional Development Fund (ERDF) and the Cohesion Fund (CF).

Direct synergy with the evaluated “GR-Energy” Programme is demonstrated by actions included under Priority 1 and the Specific Objectives RSO2.1 and RSO2.2:

- Priority 1: Energy Efficiency – Promotion of Renewable Energy Sources (RES) – Energy Infrastructure:
  - Specific Objective: RSO2.1 Promotion of energy efficiency measures and reduction of greenhouse gas emissions (ERDF & CF):
    - Actions aimed at improving energy efficiency in SMEs of the tertiary sector (including tourist accommodations) and the secondary sector, concerning building infrastructure (building envelope and systems), self-generation and energy distribution systems (both electrical and thermal),
    - Energy-saving interventions in residential buildings (under the "Exoikonomo" Programme),
    - Energy upgrading actions of public buildings (including large public buildings, central administration buildings, town halls, etc.), renovation projects and functional reintegration of public sector buildings (under the “Diatiró Dimosíou” Programme) characterized by high carbon footprint and significant architectural value.
    - Renovation and functional reintegration works of private buildings (under the "Private Sector Preservation" Programme) characterized by a high carbon footprint and, concurrently, significant architectural value
    - Actions for improving the energy efficiency of district heating and cooling systems and networks
    - Actions for the completion of energy upgrades in hospitals, universities, and other public buildings
  - Specific Objective: RSO2.2. Promotion of renewable energy sources in accordance with the Renewable Energy Directive (EU) 2018/2001[1], including the sustainability criteria established therein (ERDF):
    - Actions for the development of renewable energy projects by Energy Communities, primarily in islands, mountainous, and remote areas; promotion and enhancement of geothermal energy; energy production from floating photovoltaic installations; offshore wind energy facilities; and ocean energy technologies, including the use of biomass (excluding insular regions).
    - Actions supporting SMEs for the installation of self-generation energy systems from renewable energy sources.

4.4.1.2.2 Just Transition Development Programme 2021-2027

The "Just Transition Development Programme" 2021–2027 (JTDP), with a total budget of €1.63 billion, is co-financed by the Just Transition Fund and implemented within the framework of the cohesion policy. It serves the distinct specific objective of a just transition by providing support to regions affected by the social, labor, economic, and environmental impacts of the transition towards the Union's energy and climate targets for 2030, and towards a climate-neutral economy of the Union by 2050.

The JTDP focuses on supporting regions dependent on lignite extraction and combustion for electricity generation, as well as island regions reliant on the combustion of mazut and diesel. The intervention areas are defined as the Region of Western Macedonia, the Municipality of Megalopolis and adjacent areas, the Region of the North Aegean, the Region of the South Aegean, and the Region of Crete. The justification of the intervention areas, as well as the targeted planning for each of them, is included in the three (3) distinct Territorial Just Transition Plans (TJTPs) accompanying the JTDP.

Synergies with interventions of the evaluated "GR-Energy" Programme are demonstrated by actions falling under Priority 2 and Specific Objective JSO8.1:

- Priority 2: Energy Transition – Climate Neutrality
  - Specific Objective JSO8.1. Enable regions and people to address the social, labor, economic, and environmental impacts of the transition towards the Union's 2030 energy and climate targets and towards a climate-neutral Union economy by 2050, in accordance with the Paris Agreement (Just Transition Mechanism - JTM).
    - Energy upgrades (either individual or through energy communities) of public/municipal buildings (e.g., Municipal Services, Schools, Health Centers, etc.) and infrastructures (e.g., Wastewater Treatment Plants), residential buildings, office buildings, and production facilities
    - Preservation and expansion of district heating systems, reduction of their carbon footprint, and promotion of the penetration of clean energy sources through the use of renewables for self-generation
    - Facilitation of the development and integration of renewable energy sources into the energy system of the supported regions, aiming at full decarbonisation. This includes the installation of long-duration clean energy storage systems, the establishment of a network of residual biomass collection and management centres, the deployment of electric vehicle charging stations, and investments in new or upgraded low-, medium-, high- and extra-high-voltage grids and systems.

4.4.1.2.3 National Recovery and Resilience Plan "Greece 2.0"

The National Recovery and Resilience Plan "Greece 2.0" was approved on 13 July 2021 by the Economic and Financial Affairs Council (Ecofin) of the European Union. Following subsequent revisions of the Plan, its total budget amounted to €35.95 billion.

The Plan aims to shift the economic model towards a more outward-looking, competitive and green productive structure, supported by a high-quality and effective social protection network.

Synergies with the assessed 'GR-Energy' Programme are demonstrated by actions falling under the 'Green Transition' Pillar, and more specifically under Priority Axis 1.2 'Energy upgrade of the national building stock and spatial planning reform':

- Renovation and energy upgrading of buildings, including residential properties, businesses (secondary and tertiary sectors), public buildings, and public lighting points
- Implementation of emblematic strategic redevelopments with a focus on green transition.

4.4.1.2.4 National Development Programme (NDP) and Regional Development Programmes (RDPs) 2021 – 2025

The National Development Programme (NDP) was established with the objective of adopting an integrated system for the planning, management, monitoring, and control of interventions financed by the national resources of the Public Investment Programme (PIP).

The Regional Development Programmes (RDPs) are incorporated within the NDP. These are prepared by the Regions and include the objectives of the medium-term development planning within the respective authority's area of responsibility, based on the programming and allocation of NDP resources.

Under Development Objective 2 'Green Growth', the implementation of projects for improving energy efficiency in public buildings and the cogeneration of electricity and heat from RES is envisaged.

4.4.2 Final Assessment of the Programme's Coherence

Within the framework of the Programme Cohesion assessment, an examination is conducted to determine whether the thirteen (13) implemented projects contribute to the achievement of the Programme's objectives and output and outcome indicators, as well as whether they demonstrate synergy and complementarity with other projects of similar scope being implemented in the intervention area (Question A.5 – Annex 6.2). Similarly, the synergy and complementarity of the Programme with other development programmes, strategies, and plans are also evaluated accordingly.

The scoring ranges between 1 (minimum) and 5 (maximum), with the following interpretation:

- 1 = No coherence whatsoever,
- 2 = Minimum level of coherence,
- 3 = Moderate level of coherence,
- 4 = Nearly full level of coherence,
- 5 = Full coherence.

The scoring table of implemented projects follows.

Table 15: Assessment of the Coherence of the Funded Projects and the Programme

A/A	Project Title	scoring	Description - Analysis
1	Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini (MIS Code: 5075131)	4	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. However, the project does not demonstrate synergy or complementarity with similar actions being implemented in the intervention area
2	nZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato – Tavros (MIS Code 5075035)	4	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. However, the project does not demonstrate synergy or complementarity with similar actions being implemented in the intervention area
3	Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station (MIS Code: 5074958)	4	The project's activities contribute to the achievement of the Programme's objectives and the output and outcome indicators, with the exception of indicator EOX_R039 "Estimated Increase in Renewable Energy Production," as the initially planned renewable energy installation (photovoltaic system) was not implemented The project does not demonstrate synergy or complementarity with similar actions being implemented in the intervention area. However, due to its innovative character, the project is recommended for communication/publicity purposes by the donor countries and the Financial Mechanism Office. (FMO).
4	Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece (MIS Code: 5075132)	4	The project's activities contribute to the achievement of the Programme's objectives and the output and outcome indicators, with the exception of indicator EOX_R039 "Estimated Increase in Renewable Energy Production," as the charging stations were installed without the use of renewable energy sources (despite the relevant provision in the original design), due to saturation of the local grid and the refusal of the Hellenic Electricity Distribution Network Operator (HEDNO) to grant connection terms.. The project demonstrates synergy and complementarity with similar actions being implemented in the region: 1. Energy Upgrade of School Units of Karlovasi, Marathokampos, and Pythagoreio - Operational Programme 'North Aegean 2014-2020' Project Budget: €698,302.25 2. Energy Upgrade of School Units of Vathi, Operational Programme 'North Aegean 2014-2020'- Project Budget: 465.450,89
5	Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens (MIS Code:5073760)	5	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project demonstrates synergy and complementarity with similar actions being implemented in the region: 1. Energy Upgrade of the Roussopoulos Building – NSRF 2014–2020- 1.929.368,98 € 2. Energy Upgrade of the Dimakopoulos Building, Agricultural University of Athens – NSRF 2021–2027 - 1.240.000,00 €

A/A	Project Title	scoring	Description - Analysis
6	Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece (MIS Code: 5074843)	4	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. However, the project does not demonstrate synergy or complementarity with similar actions being implemented in the intervention area
7	Integration of Innovative Energy Technologies in Central Building Infrastructure of High acessibility of AUTh (MIS Code : 5075027)	5	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project demonstrates synergy and complementarity with similar actions being implemented in the region: 1. Energy Upgrade of the Central Library of Aristotle University of Thessaloniki – Programme "Central Macedonia 2021–2027" and under the Priority "Support for Green and Sustainable Development in Central Macedonia" – €6,250,000.00 2. Energy Upgrade of the New Building of the Faculty of Philosophy – "Sustainable Mobility Promotion Actions – Phase II" – Programme "Environment and Climate Change 2021–2027" and under Priority Axis 1: "Energy Efficiency – Promotion of RES – Energy Infrastructure" – €2,621,684.53 3. Energy Upgrade of the New Building of the Faculty of Philosophy - Sustainable Mobility Promotion Measures" - Programme "Transport Infrastructure, Environment and Sustainable Development 2014-2020" [Total Budget: €3,389,067.61]
8	Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros (MIS Code : 5074832)	4	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project does not demonstrate synergy or complementarity with similar actions being implemented in the intervention area.
9	Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama (MIS Code 5074878)	4	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project does not demonstrate synergy or complementarity with similar actions being implemented in the intervention area. However, due to its innovative nature, the project is recommended for communication/publicity purposes by the donor countries and the Financial Mechanism Office (FMO).
10	Demonstration energy renovation projects of municipal buildings of North Evros (MIS Code : 5074952)	5	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators.. The project demonstrates synergy and complementarity with similar actions being implemented in the region: 1. Energy Upgrade of "Nikos Samaras" Indoor Sports Hall in Orestiada Municipality - OP "Transport Infrastructure, Environment and Sustainable Development 2014-2020" [Budget: €2,423,210.91] 2. Energy Upgrade of Orestiada Municipality Vocational School Complex - OP "Eastern Macedonia and Thrace 2014-2020" [Budget: €2,480,600.00]

A/A	Project Title	scoring	Description - Analysis
11	Energy Upgrade of Perigialis school buildings of the Municipality of Kavala (MIS Code 5073838)	5	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project demonstrates synergy and complementarity with similar actions being implemented in the region: 1. Renovation and Extension Construction at the 21st Primary School - OP "Central Macedonia 2014-2020" [Budget: €2,260,474.84] 2. Renovation and Energy Upgrade of Former EOK Building in Kavala Municipality - OP "Transport Infrastructure, Environment & Sustainable Development 2014-2020" [Budget: €2,858,299.00] 3. Energy Upgrade of 12th Primary School - OP "Central Macedonia 2014-2020" [Budget: €1,642,855.78] 4. Energy Upgrade of Amygdaleon Indoor Sports Hall - OP "Transport Infrastructure, Environment & Sustainable Development 2014-2020" [Budget: €730,000.00] 5. Energy Efficiency Interventions at Kavala Indoor Swimming Pool - OP "Central Macedonia 2014-2020 & 2021-2027" [Budget: €1,866,820.00] 6. Renovation and Modernization of Krinides Secondary School - OP "Central Macedonia 2014-2020 & 2021-2027" [Budget: €2,004,098.20] 7. Supply and Installation of Electromechanical Equipment for Facility Modernization and Control Systems - Rural Development Programme 2014-2020 [Budget: €2,193,396.32] 8. Modernization and Upgrade of 2nd Primary School of Kavala - OP "Central Macedonia 2021-2027" [Budget: €3,625,000.00]
12	Energy upgrades and RES installation at public buildings of Vari Voula Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism (MIS Code: 5075038)	5	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project demonstrates synergy and complementarity with similar actions being implemented in the region: 1. Supply of Equipment for Energy Efficiency Improvement in Municipal Buildings of Vari-Voula-Vouliagmeni Municipality - Regional Operational Programme "Attica" [Budget: €489,999.83] (Implemented) 2. Funding Programme for Energy Upgrade of Kindergartens and Primary Schools "Athena", Ministry of Environment [Budget: €384,260.00] (Under Processing) 3. Funding Programme for Energy Upgrade of Public Buildings "Electra", Ministry of Environment [Budget: €3,721,500.00] (Under Processing)
13	Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri (MIS Code: 5074776)	5	The project's activities contribute to the achievement of the Programme's objectives and its output and outcome indicators. The project demonstrates synergy and complementarity with similar actions being implemented in the region:

A/A	Project Title	scoring	Description - Analysis
			1. Έργα ΑΠΕ και ενεργειακή αναβάθμιση τεσσάρων σχολικών μονάδων στην Δ.Κ. Αγ. Αναργύρων (2ο, 3ο Γυμνάσιο & 1ο, 2ο ΓΕΛ Αγ. Αναργύρων) - ΠΕΠ «Αττική» 2014 2020 (ΑΔΑ ΩΗΚ37Λ7-ΒΩΗ) - 860.557,00 €
-	**Programme "Renewable Energy Sources, Energy Efficiency (Programme GR - Energy)"**	5	The Programme has successfully achieved all of its objectives. It demonstrates synergies and complementarity with interventions being implemented or planned within the framework of the National Recovery and Resilience Plan "Greece 2.0", the Environment and Climate Change Programmes (PECA) 2021–2027, the "Just Transition Development" (JTD) 2021–2027, and the Regional Development Programmes (RDP) 2021–2025. The Programme contributes to the attainment of national targets and the commitments of the European Union concerning environmental, energy, and climate objectives for 2030.

Source: Project Completion Technical Reports and Indicator Achievement Reports (CRES)

The majority of the projects contribute to the achievement of the Programme's objectives and its output and outcome indicators. Eight (8) projects operate in a complementary manner with other energy upgrade interventions and energy efficiency improvement actions implemented in the intervention area.

The Programme has successfully met all of its objectives and contributes to the achievement of national targets and the European Union's commitments regarding environmental, energy, and climate goals for 2030. It demonstrates synergies and complementarities with interventions implemented or to be implemented under the National Recovery and Resilience Plan "Greece 2.0," the Environment and Climate Change Programmes (ECCP) 2021–2027, the Just Development Transition Programme (JDTP) 2021–2027, and the Regional Development Programmes (RDPs) 2021–20275.

No overlaps with other development programmes have been identified, due to the effective targeting during the Programme's design phase and the obligation of potential beneficiaries to submit a declaration of non-double funding of the planned expenditure when applying for project financing.

4.5 Sustainability

The duration and long-term sustainability of interventions and their results are being thoroughly examined and analyzed. It is noted that sustainability is assessed according to whether the achieved results will continue beyond the Programme period.

4.5.1 Assessment of Short-term, Medium-term and Long-term Sustainability

4.5.1.1 Question E.1 To what extent is it likely that the programme benefits will continue over the next five years? What are the economic, social, environmental and institutional capacities of the respective sector to maintain the benefits over time?

According to the responses provided by project implementing bodies in the Programme evaluation questionnaire (Questions E.1, E.2, E.3 and E.4 – Annex 6.2), the expected operational lifespan of the implemented projects ranges between 10 and 17 years.

Potential factors that could negatively affect the efficient operation of the projects in the future include:

- Wear and malfunction of energy system equipment (medium likelihood of occurrence),
- Lack of resources to cover the operational costs of the projects (low likelihood of occurrence),
- Limited utilisation or use of project infrastructures (low likelihood of occurrence).

All implementing entities have taken the necessary measures to address the aforementioned factors, thereby ensuring the sustainability and continued operation of their projects:

- The entities have established technical departments with experience in the maintenance of infrastructure projects;
- The operational and routine maintenance costs of the projects have been incorporated into the budgets of the respective implementing entities;
- Appropriate staff training has been carried out to ensure the effective operation and maintenance of the equipment, including the use of Building Energy Management Systems (BEMS), which enable efficient monitoring and timely technical intervention when required;
- Certain entities will assign the operation, maintenance, and repair of their projects to external contractors through a procurement procedure in accordance with Law 4412/2016, for a minimum duration of five (5) years;
- The infrastructures developed are characterised by high public usage, contributing to the visibility and dissemination of project results.

Consequently, the operation of the infrastructures and the continuation of the Programme's benefits are ensured for a period exceeding five (5) years.

The preservation of the benefits resulting from the implementation of the Programme's projects is further supported by publicity and results dissemination activities carried out both by the final beneficiaries and the Programme Operator, as well as by bilateral cooperation initiatives:

4.5.1.1.1 Publicity Actions

➢ **Project Implementing Bodies**

All final beneficiaries implemented publicity, information, public awareness-raising, and dissemination of results actions within the framework of their projects (Question B.4 – Annex 6.2).

Indicative examples include:

- Development of modern websites to showcase the progress and results of each Project.
- Organisation of online and in-person information events aimed at informing citizens about the activities implemented under each Project.
- Production of dissemination and publicity material..
- Preparation of Utilisation and Capitalization Guides tailored to the specific technology addressed by each Action (e.g. RES, energy efficiency, electromobility, etc.).

The websites of the Implementing Bodies of the GR-Energy Programme are as follows:

1. Municipality of Katerini (OOrganization for Education, Culture, Sports and Social Welfare): https://katerini-eea.eu/el/ (Unavailable)

2. Municipality of Moschato - Tavros: https://moschatou-tavrou-grenergy.eu/el/ (Unavailable)

3. The School of Fine Arts → https://asfa-eea.eu/

4. Municipality of East Samos: https://samos-eea.eu/el/ (Unavailable)

5. Agricultural University of Athens: https://aua-eea.eu/

6. Municipality of Farsala: https://eea-farsala.eu/

7. Aristotle University of Thessaloniki (AUTH): https://autheea.eu/

8. Municipality of Skyros: https://www.skyros.gr/neo/645/eea-grants-programma-isongr-energysin (Unavailable)

9. Municipal Water and Sewerage Company of Drama (DEYA Drama): https://deyad.gr/index.php/eeagrants/eeagrantsen

10. Municipality of Orestiada: https://greener-northevros.gr/

11. Municipality of Kavala: https://kavala-eea.eu

12. Municipality of Vari Voula Vouliagmeni: https://www.vvv.gov.gr/index.php/kainotomies-diakriseis-synergasies/eox

13. Municipality of Agii Anargiri - Kamaterou: https://agan-eea.eu/el/

➢ **Programme Operator**

As Programme Operator of the "GR-Energy" Programme, CRES (Centre for Renewable Energy Sources and Saving) implements the publicity rules set out in Annex 3 of the EEA Financial Mechanism Regulation 2014–2021 and in the Communication and Design Manual, EEA & Norway Grants 2014–2021 (initial edition January 2018, updated in December 2021), as well as in the Communication Plan of the "GR-Energy" Programme. To date, the following actions have been successfully implemented:

- The Programme Operator, CRES, created a dedicated website for the "GR-Energy" Programme, in accordance with paragraph 2.2.4 of Annex 3 of the Regulation.

The website (http://eeares.cres.gr/index.htm) is regularly updated in both Greek and English with information on the Call, project tenders, Actions, obligations of the Project Promoters (PPs), ongoing projects, publicity activities, and more. All information related to PP tenders is published in the "News" section of the Programme.

- The Programme Operator, CRES, organised a webinar on 28 September 2020 to support potential Project Promoters in the preparation and subsequent submission of Project Proposals under the Open Call of the "GR-Energy" Programme. The webinar focused on the Regulatory Framework of the EEA Financial Mechanism 2014–2021, eligibility rules, the evaluation procedures for Project Proposals, etc. In parallel, participants' questions were discussed, and queries were collected and subsequently answered in detail at a later stage
- A Helpdesk service operates on the Programme's website, serving as a key communication tool between the Programme Operator (CRES) and potential Project Promoters. Through this service, 50 questions related to the submission of Project Proposals under the Programme's Open Call were answered in detail. The Helpdesk continues to function as a communication channel between the Programme Operator and the Project Promoters.
- The Programme Operator, CRES, created social media accounts on platforms such as Facebook (https://www.facebook.com/EEAGRenergy), X – formerly Twitter (https://x.com/eea_gr), and LinkedIn (https://www.linkedin.com/company/eea-gr), with the aim of increasing public awareness of the "GR-Energy" projects and the role of the EEA Grants. Recent posts relate to the project contracts signed by the Project Promoters, including descriptions of the project scope, objectives, and budget, among other elements.
- The Programme Operator, CRES, participates in seminars, training events, and meetings organised by the National Focal Point (NFP) or other initiatives and institutions. A notable example is CRES's participation in the Thessaloniki International Fair on 13 September 2021, where the "GR-Energy" Programme was presented during an official event and received significant attention from the general public. In addition, in March 2022, the Programme Operator hosted at its premises a delegation from the FMO, the Norwegian Embassy, and the NFP for the first in-person meeting related to the Programme. During this meeting, key aspects and progress of the Programme were discussed, as well as the priorities of the Greek energy sector regarding Renewable Energy Sources (RES) and Energy Efficiency (EE)
- The Programme Operator, CRES, coordinates the Project Promoters with regard to their contribution to communication activities and the capitalisation of their projects. CRES is responsible for ensuring the compliance of the Project Promoters with the publicity obligations arising from Annex 3 of the EEA Financial Mechanism Regulation 2014–2021. These obligations concern the implementation of each Project Promoter's Communication Plan, their communication activities, the installation of information signs at project sites, the creation of websites/webpages for the Actions, their participation in bilateral initiatives, and the adherence to the Programme's visual identity (use of logo, reference to funding, and visibility of the contribution of the Donor States — Iceland, Liechtenstein, and Norway) in publications, press releases, events, etc.

- The Programme Operator, CRES, monitors and evaluates the effectiveness of the communication activities of the "GR-Energy" Programme in accordance with the Indicators defined in the Programme's Communication Plan. To date, it has successfully implemented the actions specified in the Plan, and an increase in quantitative targets is expected (website visits, social media followers, individuals reached by project publications, recipients of informational and promotional materials, etc.).

4.5.1.1.2 Bilateral Cooperation Actions

The Programme Operator (CRES) implemented three (3) bilateral cooperation actions:

Within the framework of the Bilateral Actions of the GR-ENERGY Programme, two-day meetings were held with the National Energy Authority of Iceland in Reykjavík, including on-site visits to the Geothermal Exhibition and the company Carbfix. The delegation, in addition to the Programme Operator (CRES), included representatives from most of the Programme's Project Promoters, as well as officials from the National Focal Point. CRES presented the objectives and activities of the Programme, which have led to the integration of innovative renewable energy and energy-saving technologies in buildings and facilities at emblematic sites in Greece, fully aligned with the strategy and requirements of the EEA Grants. Moreover, representatives from the Project Promoters presented technical details and results of each Action. This was followed by a constructive discussion aimed at exchanging know-how in the field of green technologies, comparing green transition policies of the two countries, and exploring new opportunities for cooperation.

A visit to the facilities of Norwegian Offshore Wind (NOW) in Haugesund, Norway, took place from 1 to 3 October 2024. Norwegian Offshore Wind, developed by the Marine Energy Test Center (METCentre), is currently the largest organisation for offshore wind in Norway. During the visit, the Greek delegation (CRES and ELETAEN) held presentations and discussions with representatives of NOW and METCentre, focusing on understanding the technical requirements for the construction and operation of a similar test centre in Greece. Additionally, a boat tour was conducted at the Karmøy Test Site, where the Greek delegation had the opportunity to observe the full-scale offshore wind models Zefyros and TetraSpar. The Programme Operator, CRES, is seeking opportunities for cooperation in the field of offshore wind energy in Greece. The outcomes of the meetings will be utilised to strengthen the strategic partnership between CRES and ELETAEN, as well as to expand CRES's collaboration with pioneering organisations in the sector, such as the Norwegian entity NOW, with the aim of addressing challenges, regulatory barriers, and ensuring the success of future projects.

The bilateral cooperation actions concluded with the Programme's closing event, which took place in Athens on 27 March 2025.

4.5.2 Final Evaluation of the Programme's "Sustainability"

All entities involved in the Programme have taken all necessary measures to ensure the maintenance and effective operation of their projects throughout their entire operational lifetime (project lifespan: 10 – 17 years).

Financial resources for the maintenance and operation of the projects are secured within the annual budgets of the operating entities, both for Local Authorities (OTA) and Higher Education Institutions.

As a general rule, the relevant expenses are covered by public funding for the operation of educational institutions provided by the Ministry of Interior to the Local Authorities (OTA), while any additional costs are borne by the municipalities' own resources or by the Central Autonomous Resources (established revenues of Local Government).

In certain cases, such as those concerning sports and cultural infrastructures, any revenues (generally limited) generated from granting third-party access to the facilities are also utilised.

Finally, the financial sustainability is partially ensured through revenues generated from renewable energy production installed in certain projects within the framework of the present Programme.

The publicity and results dissemination actions implemented by both the final beneficiaries of the projects and the Programme Operator, combined with the bilateral cooperation activities, contribute to the sustainability of the Programme's benefits..

4.6 Impact

The anticipated impacts of the Programme and its projects - both positive and negative, direct or indirect - on their thematic area are being thoroughly examined and analyzed in terms of their long-term effects.

4.6.1 Question ST.1 To what extent has the Programme driven (or is expected to stimulate) broader social, environmental, or economic impacts on human well-being, human rights, equality, or the environment, beyond its immediate beneficiaries?

All programmes and activities funded by the EEA Grants 2014-2021 must be based on the common values of respect for human dignity, freedom, democracy, the rule of law, and human rights, including the rights of minority groups.

They are governed by the principles of good governance and must be participatory, transparent, effective, efficient, inclusive, and subject to accountability. Zero tolerance towards corruption is applied. They are aligned with sustainable development, long-term economic growth, social cohesion, and environmental protection. The focus is placed on results and risk management.

The process of inclusion and implementation of the program's projects ensures compliance with the above principles and objectives, in accordance with the relevant declarations and measures adopted by the final beneficiaries and the entities responsible for the implementation and operation of the projects.

Regarding the broader social and economic impacts, despite the limited scale of the interventions, the nature and characteristics of the projects have a positive effect on mobilizing local authorities, businesses, and the wider public. They promote the conscious acceptance of the necessity to take measures, foster paradigm shifts, and encourage the pursuit of innovative solutions to address the environmental challenges faced by local communities.

More specifically, the selection of projects in the fields of education, sports, and culture is considered to have positively contributed to the achievement of the aforementioned objectives, as these projects objectively target the most active and sensitized segments of the general population, such as students, pupils, and the youth engaged in sports activities.

4.7 Administrative Capacity and Implementation Procedures

Evaluation of the Programme's Management and Implementation Framework, Administrative Capacity, and the Quality and Effectiveness of the processes.

The Management and Control System of the EEA Financial Mechanism 2014–2021 applies, with the necessary adaptations, the Management and Control System, procedures, and national eligibility rules for expenditures of the EU co-financed programmes under the NSRF 2014–2020 in Greece.

Designated Implementing Bodies

Greece, as the Beneficiary State, designates the following bodies as responsible for the implementation of the EEA Financial Mechanism 2014–2021 in the Memorandum of Understanding (MoU) (see Annex I), as applicable:

(a) National Focal Point: The National Focal Point (NFP) for the purposes of this document is the Special Service for the Programming, Coordination, and Monitoring of the Implementation of the Financial Mechanisms of the European Economic Area (EEA FM Special Service), under the General Secretariat for Public Investments and the NSRF of the Ministry of Development and Investments (ref. article 53A, Law 4314/2014).

(b) Certifying Authority: The Certifying Authority is the Special Service – Certifying Authority and Verification of Co-financed Programmes (hereinafter Certifying Authority), which falls under the General Secretariat for Public Investments and the NSRF of the Ministry of Development and Investments (ref. article 44, paragraph 4, Law 4314/2014).

(c) Audit Authority: The Audit Authority is the Fiscal Control Committee (EDEL) of the Ministry of Finance (ref. article 44, paragraph 5, Law 4314/2014).

(d) Irregularities Authority: The Irregularities Authority is the Special Service for the Programming, Coordination, and Monitoring of the Implementation of the Financial Mechanisms of the European Economic Area (EEA FM Special Service).

Management Information System (MIS)

The National Management Information System (MIS) maintained by the Ministry of Development and Investments, where data relating to the NSRF, other Development Programmes, and the EEA Financial Mechanism 2014–2021 are recorded.

Promotion and Publicity

All entities involved in the implementation of the EEA Financial Mechanism 2014–2021 share joint responsibility for information and communication, in accordance with the principle of proportionality, in order to ensure the widest possible dissemination of information, increase awareness, and enhance the transparency of information regarding funding opportunities, beneficiaries, and achievements.

Reports

The National Focal Point submits an annual Reports to the EEA Financial Mechanism Committee on its implementation of the EEA Financial Mechanism 2014–2021.

Publicity / Communication

The National Focal Point develops and implements a communication strategy for the EEA Financial Mechanism 2014–2021, organises at least three significant information activities or events during the programming period regarding the implementation of the EEA Financial Mechanism 2014–2021, and maintains a dedicated website exclusively for the EEA Financial Mechanism 2014–2021.

The Programme Operator develops and implements a communication plan related to the programme, organises at least two significant information activities concerning the progress of the programme and its projects, and creates a website or webpage dedicated exclusively to the programme, in both Greek and English.

Methodology for the Selection of Proposals for Actions / Projects

Projects are selected through a call for proposals procedure.

Calls for Proposals / Project Inclusion

Calls for proposals are published by the Programme Operator.

The Programme Operator is responsible for the evaluation of actions and their financing.

The Inclusion Decision is issued by the Programme Operator and signed by the competent hierarchical authority to which the Programme Operator reports or by the supervisory body.

Regarding the technical and administrative capacity of the implementing bodies at all management levels of the programme, it is evident from the interviews and the content of the implementation reports that both the National Focal Point and the Programme Operator, in addition to consistently applying the regulatory provisions and regulations, have taken all necessary measures to ensure the optimal functioning of the management and control system at all stages of the design and monitoring of implementation. This is further confirmed by the relevant responses of the final beneficiaries to the specific evaluation questions.

The technical and managerial capacity of the final beneficiaries / implementing bodies was supported and strengthened through the possibility of utilising technical consultants from the private sector, both during the design phase and throughout the procurement process and monitoring of the programme's project implementation.

Thus it is assessed that significant knowledge and experience in the implementation of similar projects have been capitalised on and integrated both within the administrative practices of the governing bodies and the relevant technical services of the entities. This is evidenced by the ease with which corresponding proposals have been submitted to the related funding instruments and programmes of the current programming period 2021–2027.

4.7.1.1 Question F.1 SWOT Analysis of the Regulatory Framework Regarding the Strengths and Weaknesses Observed

Internal Environment	**Strengths**	**Weaknesses**
	• Detailed and well-defined framework for planning, implementation, and control, • Gradual but accelerating acquisition of experience and expertise by public sector entities in the planning and execution of energy projects, • Integration of national and EU directives into the strategic and operational planning of implementing bodies, • Clear and effective control framework.	• Need for simplification of the management framework, • Limited or insufficient staffing of technical services, particularly within local authorities, • Delays and shortcomings in licensing and obtaining the required approvals, • Difficulties in implementation due to limited availability of electrical capacity and ageing energy transmission networks, • Limited possibilities for self-financing energy-saving projects.
External Environment	**Opportunities**	**Threats**
	• EU and National priorities for energy and climate, • Definition of targets and milestones for a just energy transition, • Social acceptance of energy-saving projects, • Focus and concentration of funding instruments on the implementation of renewable energy production and energy-saving projects, • Mobilisation of private investments (capital, expertise, equipment) in rapidly developing energy sectors, • Development of innovations and new technologies in cooperation with the academic and research community.	• The potential instability of production and transmission systems, • Delays in the development of energy storage projects, • The possible reduction of cohesion policy resources.

4.7.1.2 Question F.2 Analysis of the effectiveness of the management system at the programme and project levels regarding the timely delivery of projects and the uninterrupted implementation of their scope

The Programme Management System operated effectively, contributing to the timely tendering and implementation of the Programme's projects.

CRES was the first Programme Operator to implement the procedure for submitting the Interim Financial Reports through GRACE (the EEA Financial Mechanism's digital platform), as well as the integration of the Programme Management work package and all intermediate stages up to the submission of the Expenditure Declaration Report in the Greek MIS (Management Information System).

To ensure its readiness and adherence to the schedule, the Programme Operator prepared the Detailed Procedures Document for the "GR-Energy" Programme of the EEA FM 2014–2021, which is based on the "EEA FM 2014–2021 Procedures Manual". The Specification Document was submitted for approval to the National Focal Point (NFP). Subsequently, the Ministerial Decision establishing the Management and Control System for the EEA FM programmes was issued (Ministerial Decision 13249 – Government Gazette B' 526/19.2.2020). The Board of Directors of CRES approved the document and forwarded it to the Financial Mechanism Office (FMO).

It should be noted that this document was subsequently supplemented based on the Decision of the Board of Directors of CRES (444th Meeting on 22.03.2022, ADA: 9ΘΠΠ469ΗΚΜ-Ν5Κ).

All procedures followed are based on the Management and Control System (MCS) of the "GR-Energy" Programme.

The evaluation of funding applications submitted by potential beneficiaries was carried out in two stages:

A) Verification of completeness and eligibility of the submitted applications

B) Assessment of the applications based on the evaluation criteria

This process was conducted by a five-member Selection Task Force, comprising two (2) CRES officials, a representative from the Ministry of Environment and Energy, a representative from the Ministry of Economy and Development, and a representative from the Union of Regions of Greece.

Upon completion of the appeals process by the three-member Appeals Committee, the inclusion of the thirteen projects in the Programme was finalised (final ranking list of proposals).

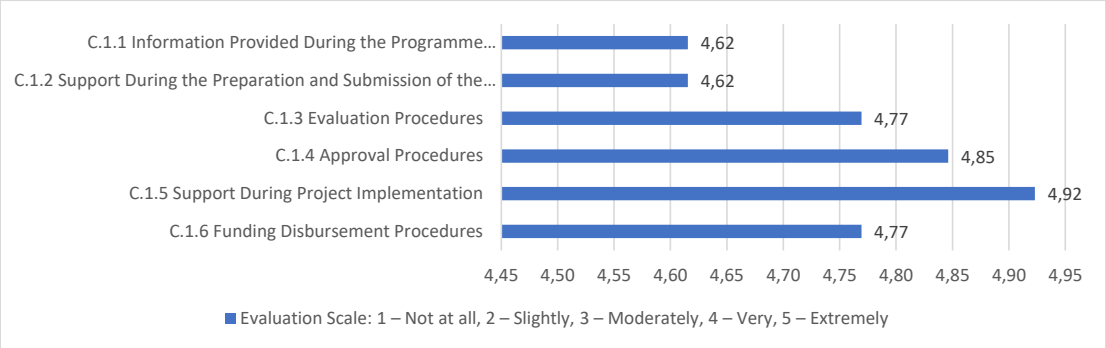
Following the selection and approval stage of the projects, the procedure for prior approval of tendering and prior approval of legal commitment was implemented.

4.7.1.3 Question F.3 Analysis of the administrative capacity and effectiveness at the Programme Operator level, the provisions of management concerning the requirements of the regulatory framework, risk management in the implementation of projects and actions, and measures taken to improve the quality of management, implementation, monitoring, and control systems

The effectiveness of the support provided by the Programme Operator (CRES) was evaluated very positively, almost to the highest degree, by all implementing bodies (beneficiaries) during the completion of the Evaluation Questionnaire.

All implementing bodies positively assessed the effectiveness of operations and the support processes during the phases of preparation and submission of funding proposals, evaluation and approval of their projects, implementation, and disbursement of funds. The overall picture is illustrated in the following chart.

Graph 4: Average Rating of Responses from Implementing Bodies (beneficiaries) Regarding the Performance of the Programme Operator in Relation to Its Functions (Question C.1)

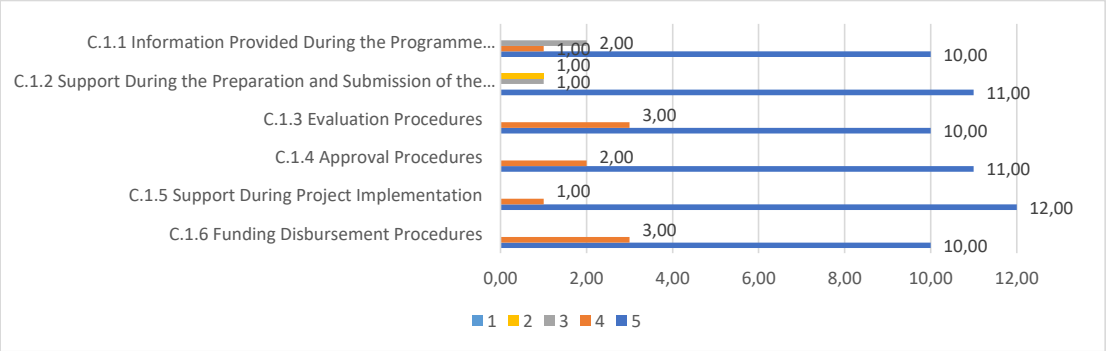


Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme

Specifically, regarding each operational component, the assessment of the project implementation bodies is summarised as follows:

- High satisfaction with support received: The majority of implementing bodies expressed satisfaction with the support provided by the Programme Operator during project implementation (12 bodies: "Extremely satisfied" and 1 body: "very satisfied").
- Positive appraisal of approval procedures: The project approval processes were equally well evaluated (11 bodies: " Extremely satisfied " and 2 bodies: " very satisfied ").
- The Programme Operator was rated as adequate in its functioning during both the funding proposal assessment and payment disbursement processes (10 bodies: " Extremely satisfied " and 3 bodies: " very satisfied ").
- Finally, the information provided by the Programme Operator during the Programme's announcement was positively evaluated (10 entities rated it as " Extremely satisfied" and 1 entity as " very satisfied "), as well as the support during the preparation and submission of funding proposals by the implementing bodies (11 entities rated it as " Extremely satisfied "). However, it is noted that two (2) entities reported that the information at the Programme announcement was "moderate," while the support during the preparation and submission of funding proposals was rated as "moderate" and "low."

Graph 5: Performance Rating of the Programme Operator's Functions by the Implementing Bodies - Beneficiaries (Question C.1)



Source: Processed Data from the Responses to the Evaluation Questionnaire of the Programme

Finally, it is worth noting that due to the effective collaboration between the Programme Operator, the Implementing Bodies, the National Focal Point (NFP), and the Financial Mechanism Office (FMO), the severe issue of funding shortfalls for the Programme's projects—caused by the increased cost of equipment—was addressed. The Programme Operator undertook all necessary procedures to ensure the timely tendering of the projects and their completion within the eligibility period.

Based on the above, we conclude that the support provided by the Programme Operator to the implementing bodies at all stages of the Programme's implementation (preparation and submission of proposals, evaluation and approval, implementation, and disbursement of funding) is considered sufficient to address the issues that arose. However, the information and support procedures for the final beneficiaries during the funding proposal preparation phase require improvement.

4.7.1.4 Question F.4 Analysis of the quality of management of the rest of management, implementation and audit authorities?

The quality of management by all involved authorities in the management, implementation, and control of the programme is considered adequate.

It is worth noting that, in order to address the need for additional financial resources from the EEA FM required for the successful implementation of the Programme, all bodies at every level of administration were mobilised promptly and effectively:

- Programme Operator (CRES),
- National Focal Point (NFP),
- Financial Mechanism Office (FMO).

It is worth noting that the Programme's expenditures were audited every six months by the Financial Mechanism Office (FMO) and the Hellenic Certification Authority, with no findings reported. Additionally, the Programme successfully passed the secondary audits conducted by Public Finance Audit Committee (audit numbers: 0920203001, 0922223001, 0923233003, 0924243004) without any findings.

5 Conclusions – Proposals – Recommendations

5.1 Relevance

The Programme was designed by CRES (Centre for Renewable Energy Sources and Saving), an institution with a formal mandate and substantive technical / managerial expertise in planning and managing programmes in the field of Renewable Energy Source (RES). The active involvement of key Greek RES market stakeholders, and relevant institutional bodies proved instrumental in identifying critical parameters for the Programme's objectives, design, and implementation, in refining proposal evaluation criteria and enhancing the project monitoring system.

The projects under the Programme actively support the achievement of objectives outlined in the National Energy and Climate Plan (NECP), which is fully aligned with European Union policy priorities and commitments. Furthermore, they address specific regional needs in the areas of energy efficiency and renewable energy sources (RES), as identified in the Regional Programmes of the beneficiary entities.

Despite its limited contribution to climate targets, the Programme, through the demonstrative nature of the implemented projects, supports the promotion of innovative solutions on improving the energy efficiency of public sector buildings and infrastructure through the combined use of Renewable Energy Sources (RES). This is achieved through the implemented dissemination activities and publicity measures, which aim to share the experience gained and highlight best practices.

Through the demonstrative actions of its thirteen (13) integrated projects, the Programme delivered energy, environmental, and economic benefits by upgrading / improving energy - intensive public buildings and facilities through the combined use of Renewable Energy Sources (RES) technologies. Simultaneously, it contributed significantly to strengthening the local economy, familiarising residents with sustainable development practices, improving quality of life, and mitigating social and economic inequalities. Furthermore, the Programme reinforced bilateral cooperation between Greece and Donor States in the fields of Renewable Energy Sources and Energy Efficiency, laying the groundwork for further collaboration and development.

From the planning phase to its completion, the Programme remained fully aligned (absolute relevance) with the developmental needs and priorities established for the sectors of Energy Efficiency (EE) and Renewable Energy Sources (RES) at various levels.

The total number of citizens who directly benefited from the implementation of the projects (users of the infrastructure) amounts to 587,887 individuals, while the Social Benefit Indicator (Total Public Expenditure / Number of Citizens Gaining Direct Benefits from the Programme) stood at approximately €22.50 per person.

5.2 Effectiveness

During the implementation of the Programme's projects, most output and outcome targets were exceeded, both in relation to the targets set in the Programme Agreement and those established during the projects' integration into the Programme. The majority of projects were implemented according to schedule within the eligibility period of expenditures.

The Programme implementation proved highly effective, achieving full qualitative coverage of all its objectives with fewer financial resources while recording overachievement of the cost-saving target. The weighted effectiveness analysis - considering both output significance and financial weighting – demonstrates overachievement of targets for cost savings and renewable energy production, marginal attainment of annual CO_2 emission reduction targets (due to relatively low effectiveness of the projects of the Municipalities of Orestiada and Vari – Voula - Vouliagmeni) and those of estimated energy savings (due to low effectiveness of the project of the Municipality of Vari-Voula-Vouliagmeni)

The average performance rating of the Programme's implemented projects is 4.54 (rounded to 5), confirming that the Programme effectively meets its objectives. The implementation contributed to the achievement of expected targets in accordance with the planned schedule. The evaluation demonstrated that it was the optimal choice among all feasible alternatives.

5.3 Efficiency

The Programme demonstrates high financial efficiency in resource utilisation, achieving full coverage of its objectives while exceeding cost-saving targets. The weighted efficiency analysis - accounting for both output significance and financial weighting - confirms overachievement in cost reduction objectives and renewable energy production targets.

The Financial Completion Rate of implemented projects ranges between 71.06% and 99.89%, with the Programme's overall rate estimated at 90.12%.

Given the typology of projects and their innovative/demonstrative nature, the unit costs are considered acceptable for most projects and for the Programme as a whole.

The most significant challenge encountered during Programme implementation - which proved critical for its successful completion - was the cost escalation of technical equipment and materials across all projects. This resulted from the energy crisis, the COVID-19 pandemic and the geopolitical instability in Ukraine and the Middle East.

The issue was successfully resolved through the highly effective collaboration between the Programme Operator, the Beneficiaries (Project Implementing Bodies), the National Contact Point (NCP) and the Financial Mechanism Office (FMO). However, additional private financing of €320,285.80 was required to ensure the successful completion of certain projects.

Due to procurement delays while awaiting additional EEA Grants funding, a minor portion of some projects could not be completed within the eligibility period. This resulted in €45,178.03 of ineligible public expenditures. The final eligible expenditure for the Programme's projects amounts to €13,181,885.65.

5.4 Coherence

The majority of projects contribute effectively to achieving both the Programme's objectives and its output/result indicators. Eight (8) projects operate in a complementary manner alongside other energy efficiency upgrades/improvements being implemented within the intervention areas.

The Programme has successfully achieved all of its objectives while simultaneously contributing to National targets and European Union commitments on environmental, energy and climate goals for 2030. It demonstrates clear synergies and complementarity with projects being implemented or planned under the National Recovery and Resilience Plan "Greece 2.0", the Environment and Climate Change Programme 2021-2027, the Just Transition Development Programme (JDTP) 2021-2027 and the Regional Development Programmes 2021-2025.

No overlaps with other development programmes have been identified, owing to the Programme's effective targeting during its development phase and the requirement for potential beneficiaries to submit a declaration on the absence of double funding for proposed expenditures when applying for project financing.

5.5 Sustainability

All the beneficiaries have undertaken the necessary measures to maintain and ensure the effective operation of their projects throughout their entire operational period (exceeding 5 years).

The publicity / dissemination activities carried out by both beneficiaries and Programme Operator, in conjunction with bilateral cooperation activities, actively contribute to preserving the Programme's long-term benefits.

5.6 Impact

The Programme's implementation procedures are governed by the principles of good governance. They are fully aligned with sustainable development objectives, long-term economic growth priorities, social cohesion targets and environmental protection commitments.

Despite the limited scale of the interventions, the nature and characteristics of the projects have a positive impact in terms of mobilising local authorities, businesses, and the wider public towards a conscious acceptance of the need to take action, embrace a paradigm shift, and seek innovative solutions to the environmental challenges faced by local communities.

5.7 Administrative Capacity and Implementation Procedures

The Programme's management system operated effectively, contributing to the timely tendering and implementation of its projects. All procedures followed were based on the Management and Control System (MCS) of the "GR-Energy" Programme.

The quality of management demonstrated by all authorities involved in the administration, implementation, and control of the Programme is assessed as adequate.

The support provided by the Programme Operator to the project implementing bodies throughout all stages of Programme implementation (preparation and submission of proposals, evaluation and approval, implementation and disbursement of funding) was assessed as adequate for addressing emerging challenges. However, the procedures for informing and supporting final beneficiaries during the project proposal development phase require improvement.

6 Annexes

6.1 Reference Material

6.1.1 List of Participants in the Consultation Workshop with Stakeholders / Organisations (of Institutional Relevance) Operating in the Fields of Renewable Energy Sources (RES) and Energy Efficiency (Program Design Phase)

S/N	List of Participants
1	Aristotle University of Thessaloniki (AUTH)
2	General Secretariat for Research and Technology (GSRT)
3	Agricultural University of Athens (AUA)
4	Financial Mechanism Officer - FMO
5	National Technical University of Athens (NTUA)
6	National Contact Point (NCP) – Ministry of Development and Investments
7	Hellenic Development Bank (HDB)
8	Hellenic Wind Energy Scientific Association (HWEA)
9	Hellenic Biomass Association (ELEABIOM)
10	Hellenic Association for the Cogeneration of Heat and Power (HACHP)
11	Hellenic Solar Industry Association (HSIA)
12	NSRF Executive Structure – Ministry of Environment and Energy (EYSPED)
13	Institute of Energy for South-East Europe (IENE)
14	Centre for Renewable Energy Sources and Saving (CRES)
15	Central Union of Municipalities of Greece (KEDE)
16	Panhellenic Association of Technical Companies (SATE)
17	University of Patras
18	echnical University of Crete
19	Ambassador of Norway
20	Hellenic Association of Photovoltaic Companies (HELAPCO)
21	Technical Chamber of Greece (TCG)
22	Ministry of Environment and Energy (MEEN)
23	Greenpeace
24	Innovation Norway
25	WWF Greece

Source: Centre for Renewable Energy Sources and Saving (CRES)

6.1.2 Organisational Structure of the Centre for Renewable Energy Sources and Saving (CRES)

- Directorate of Renewable Energy Sources
  - Department of Wind Energy
  - Department of Biomass
  - Department of Geothermal Energy
  - Department of Solar Thermal Systems
  - Department of Water Technologies
  - Department of Hydrogen Technologies
  - Department of Photovoltaic Systems and Distributed Generation
- Directorate of Development Programmes
  - Department of Development Project Studies
  - Department of Development Project Implementation
- Directorate of Energy Efficiency
  - Department of Industry and Energy Efficiency Measurements
  - Department of Buildings
  - Department of Environment and Transport
  - Department of Energy Investment Support
- Directorate for Energy Policy and Planning
  - Department of Energy Policy Analysis
  - Department of Market Development and Marketing
  - Department for the Dissemination of RES and Energy Efficiency Applications
  - Department of Training
  - Department of Energy Planning Support Systems
- Directorate of Administrative and Financial Services
  - Department of Human Resources
  - Department of Financial Monitoring of Projects and Travel
  - Department of Financial Services and Accounting
  - Department of Technical Services and Supplies

6.1.3 List of Recipients of the Results Evaluation Questionnaire for the Programme "Renewable Energy and Energy Efficiency (Programme GR – Energy)"

S/N	Beneficiary Entity	Project Title	Project Manager	e-mail	Telephone
1	Municipality of Katerini	Energy Upgrade of Municipal Stadium and actions for Reduction of Energy Footprint for the Local Community of Katerini	Dimitrios Douros, Andreas Drakopoulos	dimdouros@gmail.com, andrew.drakopoulos@gmail.com	6977572386
2	Municipality of Moschato - Tavros	nZEB Sports Building Infrastructure for the Mobilization of Active Citizens of the Municipality of Moschato - Tavros	Angeliki Karamanou	karamanou@0144.syzefxis.gov.gr	2132019649
3	The School of Fine Arts	Smart Building Model και Experiential Energy Innovation Center of ASFA at the Delphi Art Station	Erato Chatzisava, Fotini Katsavelou	echatzisava@asfa.gr, fkantzavelou@asfa.gr	2103897121/ 2
4	Municipality of East Samos	Energy Upgrade of important Building of Samos Island through RES and Energy Efficiency innovative Actions with application in all islands of Greece	Evgenios Delonis	egdelonis@yahoo.gr	2273350522 / 6932643273
5	Agricultural University of Athens	Application of innovative green technologies in emblematic building and facilities of Agricultural University of Athens	Adamantia Aristopoulou	mando@aua.gr	2105294870

S/N	Beneficiary Entity	Project Title	Project Manager	e-mail	Telephone
6	Municipality of Farsala	Integrated Energy Retrofit of a Model Center for Culture, Education and Innovation in Central Greece	Ilektra Theloura	ilektrafarsala@yahoo.gr	2491350140 / 6977988165
7	Aristotle University of Thessaloniki (AUTH)	Integration of Innovative Energy Technologies in Central Building Infrastructure of High acessibility of AUTh	Kiriaki Matsouka	matsouka@auth.gr	2310994352 2310996823
8	Municipality of Skyros	Smart Application of Innovative RES Interventions and Improvement of Energy Efficiency in Buildings και Facilities of the Municipality of Skyros	Spiridoula Skaltsari	spireta_s@yahoo.gr	2222350300
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	Demonstrative Use of Renewable και Alternative Energy Technologies in Social Infrastructures of DEYA Drama	Christodoulos Vogiazis	deyad2@gmail.com	2521037441
10	Municipality of Orestiada	Demonstration energy renovation projects of municipal buildings of North Evros	Kalenzidis Vlasakis	vlasis@orestiada.gr	2552350360
11	Municipality of Kavala	Energy Upgrade of Perigialis school buildings of the Municipality of Kavala	Niki Sidiropoulou (Resigned) Thalia Chorinou – Director of Planning and Operational Programming	program@kavala.gov.gr	2513500163

S/N	Beneficiary Entity	Project Title	Project Manager	e-mail	Telephone
12	Municipality of Vari Voula Vouliagmeni	Energy upgrades and RES installation at public buildings of Vari Voula Vouliagmeni Municipality in the frame of European Economic Area (EEA) Financial Mechanism	Agisilaos Kousias	akousias@vvv.gov.gr	2132030467
13	Municipality of Agii Anargiri - Kamaterou	Renewable Energy Projects and Energy Upgrade of public buildings in the municipal community of Agii Anargiri	Ioanna Mantzavinatou	mantzavinatou@agankam.gov.gr	2132023618

Source: Centre for Renewable Energy Sources and Saving (CRES)

6.2 Summary Description of the Survey Conducted Among the Involved Stakeholders – Questionnaire Analysis

In order to objectively evaluate the results of the 'Renewable Energy Sources, Energy Efficiency (Programme GR - Energy)', a field survey was carried out through interviews with the thirteen (13) implementing bodies of the funded projects, using a semi-structured questionnaire..

The questionnaire comprises multiple-choice questions (with predefined response options), targeted open-ended explanatory questions (guiding respondents toward specific answers), and exploratory open-ended questions (allowing for extended responses)

In order to facilitate the beneficiaries and expedite their response, certain fields (target values of output indicators) were pre-filled based on the project inclusion decisions and data provided by the Programme Operator, with the aim of confirming their accuracy by the beneficiaries.

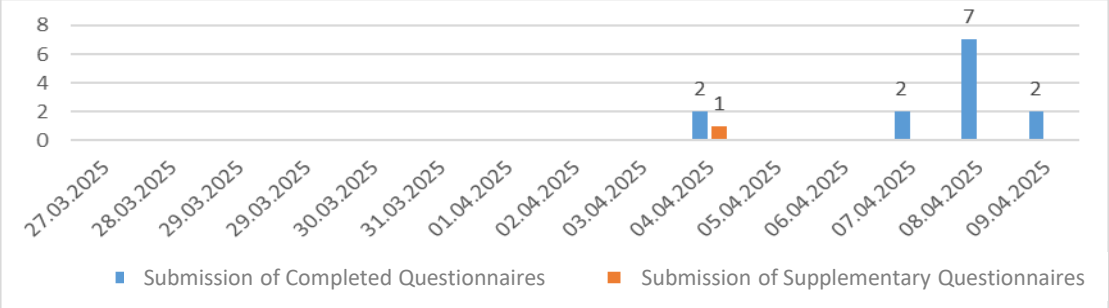
The questionnaire was sent electronically to the project managers (the list of recipients is included in Annex 6.1.3), accompanied by an informational cover letter on 27.03.2025. This was followed by telephone communication to provide additional information. The deadline for the submission of the completed questionnaires was set for 04.04.2025

The completed questionnaires were gradually submitted to the consultant between 04.04.2025 and 09.04.2025

Due to incomplete filling of certain elements in the questionnaire (quantitative data on target achievement, output indicators, assessment of benefits/impacts, etc.), the questionnaires were resent, and the final beneficiaries were informed by telephone to ensure comprehensive coverage of all evaluation criteria.

As of the date of submission of this report, only one entity has responded by providing supplementary information (the Municipality of Vari-Voula-Vouliagmeni).

Graph 6: Timeline for the Submission of Completed Questionnaires and Supplementary Information by the Implementing Bodies



Source: Internal Analysis

It should be noted that, during communication with the project managers, it was observed that several of them did not have a clear understanding of the outcomes of the actions implemented, as the evaluation questionnaires were completed either by the technical support consultants/designers or by the contracting companies responsible for the implementation of the physical deliverables.

TThe data collected through the questionnaire were assessed in conjunction with the information provided by the Programme Operator (CRES) for verification purposes. Information gaps resulting from incomplete questionnaires were addressed using the data included in the Technical Completion Reports and the Reports on the Achievement of Energy and Other Targets.

The following tables present the data extraction (codification) of the Evaluation Questionnaires concerning the Results of the Programme.

A.	Beneficiary Notification / Project Maturity and Implementation Procedures

A.1	By what means did your organization receive information regarding the 'GR-Energy' Programme's existence, its objectives, and the funding application process?

S/N	Beneficiary Entity	Response
1	Municipality of Katerini	Through the publication of the relevant Call for Proposals.
2	Municipality of Moschato - Tavros	The Municipality of Moschato–Tavros was informed about the existence of the 'GR-Energy' Programme, its objectives, and the procedure for submitting funding proposals through an official announcement by the Mechanism
3	The School of Fine Arts	Ο φορέας μας ενημερώθηκε για το Πρόγραμμα «GR - Energy» από την επίσημη ιστοσελίδα του Προγράμματος.
4	Municipality of East Samos	Communication with Partner
5	Agricultural University of Athens	Monitoring of all EEA Grants Programmes
6	Municipality of Farsala	The implementing entity was informed about the existence of the 'GR-Energy' Programme, its strategic objectives, and the relevant procedures for submitting funding proposals via the Programme's official website
7	Aristotle University of Thessaloniki (AUTH)	The entity was informed about the existence of the Programme "GR – Energy", its objectives, and the procedure for submitting funding proposals through online sources, specifically: 1. The Call for Proposals for Actions under the EEA Financial Mechanism (EEA FM) 2014–2021 addressed to Potential Project Promoters, with Call Code 3740 on the OPS platform (Ref. No. 1097/CRES, dated 22/07/2020, ADA: 6Ξ8Ξ469ΗΚΜ-4ΛΔ); and 2. The 1st Amendment to the Open Call for Expressions of Interest for the Submission of Project Proposals under the EEA FM 2014–2021 (EEA Financial Mechanism) – Programme Area: GR – Energy – Renewable Energy Sources, Energy Efficiency, Energy Security
8	Municipality of Skyros	Through the open Call for Proposals (Ref. No. 1097/22-07-2020) issued by CRES for the submission of project proposals under the Programme of the EEA Financial Mechanism 2014–2021 ('GR–Energy'), and through the online Information Day presenting the Call.
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	Through the open Call for Proposals (Ref. No. 1097/22-07-2020) issued by CRES for the submission of project proposals under the Programme of the EEA Financial Mechanism 2014–2021 ('GR–Energy'), and through the online Information Day presenting the Call."

S/N	Beneficiary Entity	Response
10	Municipality of Orestiada	From an external associate
11	Municipality of Kavala	internet
12	Municipality of Vari Voula Vouliagmeni	The Municipality of Vari-Voula-Vouliagmeni, as a prospective beneficiary, was informed in accordance with Call for Proposals No. 3740/22-07-2020 issued by the Programme Operator – CRES (Centre for Renewable Energy Sources and Saving)
13	Municipality of Agii Anargiri - Kamaterou	Upon the publication of the relevant Call for Proposals.

A.2	Δ Did your organisation have a comprehensive plan for energy saving or for the utilisation of Renewable Energy Sources (RES) to meet core needs or reduce energy costs?

S/N	Beneficiary Entity	Yes	No	Comments
1	Municipality of Katerini		1	
2	Municipality of Moschato - Tavros		1	
3	The School of Fine Arts		1	
4	Municipality of East Samos		1	
5	Agricultural University of Athens		1	
6	Municipality of Farsala		1	
7	Aristotle University of Thessaloniki (AUTH)	1		The methodology developed and implemented by the Aristotle University of Thessaloniki (AUTh) was designed with the aim of preparing the proposed Action for funding. The methodological approach adopted by AUTh included the following steps: i. Data Collection and Requirements Analysis ii. Formation of the Proposal Development Team iii. Selection of AUTh Building Infrastructure iv. Issuance of the Energy Performance Certificate (EPC) and Energy Dimensioning of Interventions v. Maturation of Interventions and Actions Included in the Proposal vi. Completion of the Technical Data Sheet of the Proposed Action and the Technical Specifications Form vii. Preparation of the Remaining Supporting Documents Required for the Proposal In addition, the implementation plan of the Action was carefully designed to ensure its full operational functionality and the eventual transformation of the Faculty of Sciences building of AUTh into a model energy-upgraded facility.

S/N	Beneficiary Entity	Yes	No	Comments
				This upgraded building will provide an excellent working environment for university staff, while also ensuring comfortable day-to-day living conditions for students, faculty members, employees, and visitors.The Technical Services Department of the Aristotle University of Thessaloniki (AUTH), responsible for the comprehensive monitoring of the interventions' implementation, undertook the completion, maintenance, and operation of the building. AUTH staff members were informed and trained to become familiar with the management and efficient use of the facilities. In parallel, a comprehensive risk management plan was developed, which included all necessary measures to reduce the likelihood of potential risks and to mitigate their impact on the smooth implementation of the Action.
8	Municipality of Skyros		1	
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)		1	
10	Municipality of Orestiada	1		he Municipality has an approved Sustainable Energy and Climate Action Plan (SECAP) by the European Commission, within the framework of its participation in the Covenant of Mayors
11	Municipality of Kavala		1	The Municipality of Kavala currently has only one operational plan: the Sustainable Urban Mobility Plan (SUMP).
12	Municipality of Vari Voula Vouliagmeni	1		he Municipality of Vari-Voula-Vouliagmeni is developing and updating a comprehensive energy upgrade plan for its municipal building stock.
13	Municipality of Agii Anargiri - Kamaterou		1	
	Total	**3**	**10**	
	Percentage (%)	**23%**	**77%**	

A.3	Through which process was the project maturation achieved (feasibility, technical studies, permits, etc.)

A.3.1	Using in-house technical service resources

S/N	Beneficiary Entity	Yes	No
1	Municipality of Katerini	1	
2	Municipality of Moschato - Tavros	1	
3	The School of Fine Arts	1	
4	Municipality of East Samos	1	
5	Agricultural University of Athens	1	

S/N	Beneficiary Entity	Yes	No
6	Municipality of Farsala	1	
7	Aristotle University of Thessaloniki (AUTH)	1	
8	Municipality of Skyros	1	
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1	
10	Municipality of Orestiada		1
11	Municipality of Kavala		1
12	Municipality of Vari Voula Vouliagmeni		1
13	Municipality of Agii Anargiri - Kamaterou	1	
	Total	**10**	**3**
	Percentage (%)	**77%**	**23%**

A.3.2	Using internal resources and specialized technical support

S/N	Beneficiary Entity	Yes	No
1	Municipality of Katerini		1
2	Municipality of Moschato - Tavros		1
3	The School of Fine Arts		1
4	Municipality of East Samos		1
5	Agricultural University of Athens		1
6	Municipality of Farsala		1
7	Aristotle University of Thessaloniki (AUTH)		1
8	Municipality of Skyros		1
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)		1
10	Municipality of Orestiada	1	
11	Municipality of Kavala	1	
12	Municipality of Vari Voula Vouliagmeni	1	
13	Municipality of Agii Anargiri - Kamaterou		1
	Total	**3**	**10**
	Percentage (%)	**23%**	**77%**

A.4	Was the project implementation awarded through a competitive tendering procedure?

S/N	Beneficiary Entity	Yes	No	specify the institutional framework
1	Municipality of Katerini	1		N.4412/2016
2	Municipality of Moschato - Tavros	1		N.4412/2016
3	The School of Fine Arts	1		N.4412/2016
4	Municipality of East Samos	1		N.4412/2016

S/N	Beneficiary Entity	Yes	No	specify the institutional framework
5	Agricultural University of Athens	1		N.4412/2016
6	Municipality of Farsala	1		N.4412/2016
7	Aristotle University of Thessaloniki (AUTH)	1		Due to the budget allocation of the sub-projects under the Action, the procurement procedure followed the provisions of Law 4412/2016 on the award of contracts for supplies and services. This involved an above-threshold tender for Sub-project 1 and below-threshold procedures for Sub-projects 2, 3, 4 and 5.
8	Municipality of Skyros	1		N.4412/2016
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1		N.4412/2016
10	Municipality of Orestiada	1		N.4412/2016
11	Municipality of Kavala	1		N.4412/2016
12	Municipality of Vari Voula Vouliagmeni	1		Implementation was carried out through a combination of competitive tendering procedures for Works and Supplies, as well as through the direct award of two (2) Service Contracts.
13	Municipality of Agii Anargiri - Kamaterou	1		N.4412/2016
	Total	**13**	**0**	
	Percentage (%)	**100%**	**0%**	

A.5	Does the organization you represent implement other energy efficiency improvement and renewable energy utilization projects in buildings and infrastructure of the public and wider public sector (Programming Periods 2014–2020 and 2021–2027)

S/N	Beneficiary Entity	Yes	No	Response (Project Title, Funding Programme, Budget)
1	Municipality of Katerini		1	
2	Municipality of Moschato - Tavros		1	
3	The School of Fine Arts		1	
4	Municipality of East Samos	1		1. Energy Upgrade of School Units in the Municipal Units of Karlovasi, Marathokampos and Pythagoreio – Operational Programme 'North Aegean 2014–2020' (ESPA) – €698,302.25 2. Energy Upgrade of School Units in the Municipal Unit of Vathi – Operational Programme 'North Aegean 2014–2020' (ESPA) – €465,450.89"
5	Agricultural University of Athens	1		1. Energy Upgrade of the Roussopoulou Building – Operational Programme 2014–2020 (ESPA) – €1,929,368.98 2. Energy Upgrade of the Dimakopoulou Building of the Agricultural University of Athens – Operational Programme 2021–2027 (ESPA) – €1,240,000.00
6	Municipality of Farsala	1		

S/N	Beneficiary Entity	Yes	No	Response (Project Title, Funding Programme, Budget)
7	Aristotle University of Thessaloniki (AUTH)	1		1. Energy Upgrade of the Central Library of the Aristotle University of Thessaloniki – Programme 'Central Macedonia 2021–2027', under the Priority Axis 'Support for Green and Sustainable Development in Central Macedonia' – €6,250,000.00 2. Aristotle University of Thessaloniki: Energy Upgrade of the New Building of the Faculty of Philosophy – Actions to Promote Sustainable Mobility – Phase II – Programme 'Environment and Climate Change 2021–2027', under Priority Axis 1: 'Energy Efficiency – Promotion of RES – Energy Infrastructure' – €2,621,684.53 3. UTH: ENERGY UPGRADE OF THE NEW PHILOSOPHY SCHOOL BUILDING – ACTIONS TO PROMOTE SUSTAINABLE MOBILITY Programme: "Transport Infrastructure, Environment, and Sustainable Development 2014–2020" Budget: €3,389,067.61
8	Municipality of Skyros		1	
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)		1	
10	Municipality of Orestiada	1		1. Energy Upgrade of the 'Nikos Samaras' Indoor Gymnasium of the Municipality of Orestiada – Operational Programme 'Transport Infrastructure, Environment and Sustainable Development 2014–2020' – €2,423,210.91 2. Energy Upgrade of the Vocational High School (EPAL) Complex of the Municipality of Orestiada – Regional Operational Programme of Eastern Macedonia and Thrace 2014–2020 – €2,480,600.00
11	Municipality of Kavala	1		1. Renovation and Extension Construction at the 21st Primary School – Regional Operational Programme of Eastern Macedonia and Thrace 2014–2020 – €2,260,474.84 2. Renovation and Energy Upgrade of the Former EOK Building in the Municipality of Kavala – Operational Programme 'Transport Infrastructure, Environment and Sustainable Development 2014–2020' – €2,858,299.00 3Energy Upgrade of the 12th Primary School – Regional Operational Programme of Eastern Macedonia and Thrace 2014–2020 – €1,642,855.78 4. nergy Upgrade of the Amygdaleonas Indoor Gymnasium – Operational Programme 'Transport Infrastructure, Environment and Sustainable Development 2014–2020' – €730,000.00 5. Energy Upgrade Interventions at the Kavala Indoor Swimming Pool – Regional Operational Programme of Eastern Macedonia and Thrace 2014–2020 & 2021–2027 – €1,866,820.00 6. Renovation and Upgrade of the Krinides Secondary School (Gymnasium–Lyceum) – Regional Operational Programme of Eastern Macedonia and Thrace 2014–2020 & 2021–2027 – €2,004,098.20

S/N	Beneficiary Entity	Yes	No	Response (Project Title, Funding Programme, Budget)
				7. Supply and Installation of Electromechanical Equipment for the Modernisation and Control of Facilities – Rural Development Programme 2014–2020 – €2,193,396.32" 8. Modernization and Energy Upgrade of the 2nd Primary School of Kavala - Operational Programme "Eastern Macedonia - Thrace" (EP AMTH) 2021-2027 - €3,625,000.00
12	Municipality of Vari Voula Vouliagmeni	1		1. **Supply of Equipment for the Improvement of Energy Efficiency in Municipal Buildings of the Municipality of Vari-Voula-Vouliagmeni –** Regional Operational Programme "Attica" – €489,999.83 **(Implemented)** 2. **Funding Programme for the Energy Upgrade of Kindergartens and Primary Schools "ATHENA",** Ministry of Environment and Energy – €384,260.00 **(Under Incorporation)** 3. **Funding Programme for the Energy Upgrade of Public Buildings "ILECTRA",** Ministry of Environment and Energy – €3,721,500.00 **(Under Incorporation**
13	Municipality of Agii Anargiri - Kamaterou	1		1. Renewable Energy Sources (RES) and Energy Upgrade Works for Four School Units in the Municipal District of Agii Anargyri (2nd and 3rd Gymnasiums & 1st and 2nd General Lyceums of Agii Anargyri) – Operational Programme "ATTICA" 2014–2020 (ADA: ΩΗΚ37Λ7-ΒΩΗ) – €860,557.00
	Total	**8**	**5**	
	Percentage (%)	**62%**	**38%**	

B.	Project Effectiveness

B.1	Did the acceptance process include a trial operation period?

S/N	Beneficiary Entity	Yes	No	Quantitative Indicators for Assessing Goal Achievement			
				B.1.1 Annual electricity and thermal energy consumption of infrastructure prior to project implementation (in MWh)	B.1.2 Annual consumption of electrical and thermal energy by infrastructure following project implementation (in MWh)	B.1.3 Annual energy consumption of infrastructure derived from RES (Renewable Energy Sources) installed under the project implementation (in MWh)	B.1.4 Estimated annual reduction in carbon dioxide emissions following project implementation (in tonnes of CO_2)
1	Municipality of Katerini		1	NA [5]	NA	NA	NA
2	Municipality of Moschato - Tavros		1	1,5	0,7	15	261
3	The School of Fine Arts		1	NA	NA	NA	NA
4	Municipality of East Samos		1	NA	NA	NA	NA
5	Agricultural University of Athens	1		NA	NA	NA	310,28

[5] Not Answered

S/N	Beneficiary Entity	Yes	No	Quantitative Indicators for Assessing Goal Achievement			
				B.1.1 Annual electricity and thermal energy consumption of infrastructure prior to project implementation (in MWh)	B.1.2 Annual consumption of electrical and thermal energy by infrastructure following project implementation (in MWh)	B.1.3 Annual energy consumption of infrastructure derived from RES (Renewable Energy Sources) installed under the project implementation (in MWh)	B.1.4 Estimated annual reduction in carbon dioxide emissions following project implementation (in tonnes of CO_2)
6	Municipality of Farsala		1	NA	NA	NA	NA
7	Aristotle University of Thessaloniki (AUTH)		1	NA	NA	NA	NA
8	Municipality of Skyros	1		341,54	97,91	111	701
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1		474,41	133,41	303	161
10	Municipality of Orestiada	1		866,1	157,4	145,5	155,7
11	Municipality of Kavala	NA	NA	NA	NA	NA	NA
12	Municipality of Vari Voula Vouliagmeni		1	1.333,27	937,45	280,21	319,22
13	Municipality of Agii Anargiri - Kamaterou	1		235	107,6	32	38,9
	Total	**5**	**7**	**3.251,82**	**1.434,47**	**886,71**	**1.947,10**
	Percentage (%)	**42%**	**58%**				

B.1.5 Output Indicators

S/N	Indicator Code, Indicator Title and Unit of Measurement	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Σύνολο Προγράμματος
1	EOX_O004 Number of awareness raising campaigns carried out (mumber)	1	1	1	1	1	1	1	NA	1	1	1	1	1	**12**
2	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	1	1	1	1	1	1	1	NA	1	1	1	1	1	**12**
3	EOX_O034 Installed capacity for production of renewable energy (in MW)	0,01	0,01	0,18[6]	0,02[12]	0,04	0,01	0,01	0,08	0,100	0,250	0,470	0,181	0,020	**1,381**
4	EOX_O039 Number of people reached by awareness campaigns (number)	5.600	4.041	5.250	9.000	1.400	3.709	5.250	NA	3.500	7.854	3.213	13.200	45.000	**107.017**

[6] Incorrect reporting, as per the achievement reports on energy and other targets, the value is zero (0) since the implementing bodies did not install RES (Renewable Energy Systems) in their projects.

S/N	Indicator Code, Indicator Title and Unit of Measurement	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Σύνολο Προγράμματος
5	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	1	1	1	1	1	2	1	ΔΑ	1	3	1	7	1	**21**
6	EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	1	1	1	1	1	1	1	ΔΑ	1	3	1	7	1	**20**
7	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	1	1	1	1	1	1	1	ΔΑ	1	3	1	7	1	**20**
8	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	56	202	100	45	72	92	150	ΔΑ	19	30	1.020	50	740	**2.576**
9	EOX_O045 Number of conferences / workshops held related to results from projects (number)	3	3	3	3	3	3	3	ΔΑ	2	3	2	7	5	**40**

S/N	Indicator Code, Indicator Title and Unit of Measurement	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Σύνολο Προγράμματος
10	EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	1	1	1	1	1	1	1	ΔΑ	1	1	1	1	1	**12**

The results in the table were cross-checked and corrected based on data from the Technical Completion Reports and the Key Achievement Point (KAP) Indicator Achievement Reports

B.2	Financial Data

	Beneficiary Entities						
	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki
Total Public Expenditure of the Project (€)	882.642,08 €	741.341,68 €	912.869,58 €	694.969,24 €	1.010.928,58 €	688.161,79 €	1.043.993,86 €
Private Contribution (€)	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Total Project Cost (€)	**882.642,08 €**	**741.341,68 €**	**912.869,58 €**	**694.969,24 €**	**1.010.928,58 €**	**688.161,79 €**	**1.043.993,86 €**

	Beneficiary Entities						
	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Total Programme [Amount]
Total Public Expenditure of the Project (€)	1.235.611,66 €	1.291.274,01 €	1.101.851,49 €	1.102.658,85 €	1.193.247,18 €	1.290.695,93 €	**13.190.245,93 €**
Private Contribution (€)	0,00 €	0,00 €	0,00 €	161.069,06 €	159.216,74 €	0,00 €	**320.285,80 €**
Total Project Cost (€)	**1.235.611,66 €**	**1.291.274,01 €**	**1.101.851,49 €**	**1.263.727,91 €**	**1.352.463,92 €**	**1.290.695,93 €**	**13.510.531,73 €**

B.2.1	Were the available financial resources sufficient for the implementation of the planned interventions under your project?

S/N	Beneficiary Entity	Yes	No	[If not, please specify the additional interventions that would have been required (including their budget) for the project to achieve full completion as originally designed.]
1	Municipality of Katerini	1		
2	Municipality of Moschato - Tavros	1		
3	The School of Fine Arts	1		
4	Municipality of East Samos	1		
5	Agricultural University of Athens	1		
6	Municipality of Farsala	1		
7	Aristotle University of Thessaloniki (AUTH)	1		
8	Municipality of Skyros	1		
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1		
10	Municipality of Orestiada		1	The funding application for the project under CRES's open call was submitted in November 2020. Accordingly, the maturity studies for the technical sub-projects were prepared in mid-2020. As a result, the significant increases in material prices that occurred in Greece during the period 2021–2023 led to insufficient financial resources for full project implementation. To address this issue, the physical scope of the project was reduced. Interventions such as mechanical ventilation, thermal energy storage using phase-change materials, and photovoltaic systems were removed. A portion of the photovoltaic systems was eventually implemented thanks to the Managing Authority's provision allowing the reallocation of savings generated through the tendering procedures of the technical sub-projects. The estimated budget of the interventions that were ultimately not implemented amounts to approximately €70,000.00.
11	Municipality of Kavala	ΔΑ	ΔΑ	
12	Municipality of Vari Voula Vouliagmeni		1	It was necessary for the beneficiary municipality of Vari-Voula-Vouliagmeni to contribute its own resources in order to cover the budget of Sub-project 2 'Procurement of heat pumps, lighting fixtures and systems, renewable energy sources (RES), and measurement and recording equipment.
13	Municipality of Agii Anargiri - Kamaterou	1		
	Total	**10**	**2**	
	Percentage (%)	**83%**	**17%**	

B.3	Were any delays or procedural/legal issues identified during the project's preparation or implementation phases?

S/N	Beneficiary Entity	Yes	No	(If yes, please specify the aforementioned issues/difficulties and suggest how they could have been avoided or mitigated)
1	Municipality of Katerini		1	
2	Municipality of Moschato - Tavros		1	
3	The School of Fine Arts		1	
4	Municipality of East Samos		1	
5	Agricultural University of Athens		1	
6	Municipality of Farsala		1	
7	Aristotle University of Thessaloniki (AUTH)	1		Sub-project 5: Postponement of the delivery period for items under Contract No 622/2023 until 5 April 2024 (upper limit), without application of the penalties stipulated in Article 207 of Law 4412/2016 of the Hellenic Republic, as amended, given that the grounds for extension invoked by the company constitute force majeure circumstances not attributable to fault on its part. Sub-project 3.4: The delivery dates of the following deliverables have been modified:a) A.1.4, to ensure the availability of technical specifications for the equipment, in order to define the appropriate measuring devices, b) G.2.2a, so that the website is delivered updated with the full details and final results of the action, c) G.2.2b, to ensure the publicity material is updated to reflect the physical scope of the action, d) G.2.3, so that the informational workshops present the final results of the action.
8	Municipality of Skyros		1	
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)		1	
10	Municipality of Orestiada		1	
11	Municipality of Kavala	1		The implementation of the Action encountered no significant difficulties beyond systemic procurement and delivery challenges affecting electrical/mechanical equipment and structural materials, resulting from global supply chain disruptions under the ongoing energy crisis. In parallel, delays were recorded in the licensing procedure for the photovoltaic system under the net metering scheme, as well as in the installation of the horizontal geothermal heat exchanger within the school premises. The latter works required execution exclusively during non-operational periods of the educational facility to ensure absolute compliance with student safety imperatives.
12	Municipality of Vari Voula Vouliagmeni		1	

S/N	Beneficiary Entity	Yes	No	(If yes, please specify the aforementioned issues/difficulties and suggest how they could have been avoided or mitigated)
13	Municipality of Agii Anargiri - Kamaterou	1		Delays have been identified that are attributable exclusively to the Hellenic Electricity Distribution Network Operator (DEDDIE), due to significant processing backlogs in responding to requests for power capacity upgrades in buildings for heat pump installations and grid interconnection of photovoltaic systems.
	Total	**3**	**10**	
	Percentage (%)	**23%**	**77%**	

B.4	Were publicity, information, public awareness, and dissemination activities implemented within the framework of the project?

S/N	Beneficiary Entity	Yes	No	(If yes, please specify)
1	Municipality of Katerini	1		Yes, publicity, information, public awareness, and dissemination activities were implemented as part of the project. Specifically: • Three online workshops were conducted, focusing on the outcomes of the project interventions. • An awareness-raising campaign was carried out, promoted primarily through the project's official website (https://katerini-eea.eu/el/), and complemented by internal citizen questionnaires. • A total of 5,600 individuals were informed, either through participation in public events or through visits to the website and the upgraded infrastructure. • A Guidance Document on Energy-Efficient Buildings and Infrastructure was published as Deliverable 1.12 under the Consultant's contract. • Staff from the Municipality's Technical Service Department received targeted training from the contractors of the construction sub-projects, reaching a total of 56 personnel.
2	Municipality of Moschato - Tavros	1		Publicity, information and public awareness activities were implemented within the framework of the project. These included events addressed to both children and adults, seminars, workshops, as well as campaigns promoting the outcomes of the Action. In total, 4,041 citizens were informed, and three thematic events were organized. Furthermore, relevant guidance material was published in support of the communication activities.
3	The School of Fine Arts	1		Within the framework of the project, a comprehensive publicity plan was implemented, which included the following activities: • Development of an experiential and interactive website; • Organisation of three information events / workshops; • Awareness campaign involving the placement of banners and signage at the Delphi Art Station; • Targeted outreach activities aimed at informing students of the Athens School of Fine Arts (ASFA);

S/N	Beneficiary Entity	Yes	No	(If yes, please specify)
				• Operation of an experiential laboratory to foster environmental and energy awareness; • Development of knowledge-sharing guides and dissemination of project outcomes.
4	Municipality of East Samos	1		A comprehensive communication plan was implemented, comprising the following components: • A public awareness campaign targeting the general population; • Development of a dedicated website for the dissemination of project outcomes; • Organization of three informational events (info days); • Delivery of online training sessions and presentations through a "live laboratory" format; • Publication of a guidance document on energy-efficient buildings; • Collaboration with a Norwegian company for the dissemination and exchange of results.
5	Agricultural University of Athens	1		Information and awareness-raising for students
6	Municipality of Farsala	1		Yes, within the framework of the project, a series of publicity, information, public awareness, and results dissemination activities were implemented. Specifically, informational events and an educational workshop targeting pupils were organized, a dedicated project website was developed, and printed and promotional material was distributed. Furthermore, a public information and awareness-raising campaign was conducted, three thematic workshops were held, and a building user manual was produced to support optimal energy performance .In total, 3,709 citizens were informed, and 92 individuals received training.
7	Aristotle University of Thessaloniki (AUTH)	1		As part of the proposed Action, the Aristotle University of Thessaloniki (AUTh) developed a comprehensive publicity plan aiming to define, specify, and describe in detail all communication and information activities. In parallel, the objective of AUTh's Communication Plan was to raise awareness among target groups and to inform the public about the University's pioneering initiatives and the practical operation of an innovative and positively-impactful living lab in the fields of Renewable Energy Sources (RES) and Energy Efficiency. The plan also sought to highlight the lab's contribution to sustainable development, to present the outcomes of the programme, and to promote best practices stemming from innovative energy upgrade technologies in buildings and infrastructures. The communication activities of the Aristotle University of Thessaloniki (AUTh) included the following: • The practical operation of an intelligent and positively-oriented living lab, serving as a hub for the promotion of research and innovation, and as a mechanism for linking academic research with the development of the pioneering market of Renewable Energy Sources (RES) and Energy Efficiency (EE).

S/N	Beneficiary Entity	Yes	No	(If yes, please specify)
				• The development of modern communication materials, such as informative leaflets, project posters, and other relevant content. • The creation of a modern, interactive website providing essential information on the progress of the projects and the outcomes of the Action. • The establishment of social media accounts to enhance outreach efforts and increase traffic to the Action's official website. • The organisation of three public information events with dual objectives: to provide details about the Programme and the Action, and to offer educational content on green energy technologies. • The installation of a temporary project signboard during implementation, followed by the placement of a permanent commemorative plaque upon completion.
8	Municipality of Skyros	1		ΥΠ Α/Α4 Provision of specialised services for the dissemination and communication of the Action's results
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1		ΥΠ Α/Α4 Provision of specialised services for the dissemination and communication of the Action's results
10	Municipality of Orestiada	1		On-site visits, 1.000 individuals Number of persons reached by awareness campaigns 7.854
11	Municipality of Kavala	1		In addition to the activities foreseen under the relevant sub-project, the action was published on the official website of the Municipality.
12	Municipality of Vari Voula Vouliagmeni	1		Under Sub-project 3: "Advisory Services for the Implementation of Communication Activities", the following actions were carried out: A1. Design, production and distribution of printed materials in both standard and Braille formats (leaflets, seminar and event materials, posters). A2. Information sessions for local residents. A3. Awareness-raising events/workshops for students and/or parents. A4. Information sessions for municipal staff. A5. Training seminars for professional engineers.
13	Municipality of Agii Anargiri - Kamaterou	1		As part of the project, activities related to publicity, information dissemination, public awareness, and results dissemination were implemented under Sub-project 2, which included training, networking, and communication. Two online conferences and five workshops were held, a model web platform was developed, and 740 individuals were trained on energy efficiency topics. It is estimated that more than 45,000 citizens were reached with information. These actions contributed significantly to the achievement and verification of the relevant awareness-raising indicators.
	Total	**13**	**0**	
	Percentage (%)	**100%**	**0%**	

B.5	Beneficiaries

S/N	Beneficiary Entity	Number of direct beneficiaries of the project implementation – users of improved public infrastructure (individuals)	Number of indirect beneficiaries under the project's publicity / information / awareness-raising / results dissemination activities (individuals)	Number of jobs created in the context of infrastructure operation [individuals]
1	Municipality of Katerini	75.000	5.600	2
2	Municipality of Moschato - Tavros	141.456	4.041	2
3	The School of Fine Arts	45.000	5.250	2
4	Municipality of East Samos	13.500	9.000	1
5	Agricultural University of Athens	105.466	1.400	ΔΑ
6	Municipality of Farsala	116.325	3.709	2
7	Aristotle University of Thessaloniki (AUTH)	49.980	5.250	2
8	Municipality of Skyros	3.006	2.988	1
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	3.300	3.500	1
10	Municipality of Orestiada	6.854	7.854	2
11	Municipality of Kavala	15.000	3.213	1
12	Municipality of Vari Voula Vouliagmeni	6.550	13.200	4
13	Municipality of Agii Anargiri - Kamaterou	6.450	45.000	4
	Programme Total	**587.887**	**110.005**	**24**

B.6	**Evaluate the benefits and potential impacts arising from the implementation of the project, with reference to both the implementing organisation and the local community** **Assessment scale: 1 – None, 2 – Low, 3 – Moderate, 4 – High, 5 – Very high**

		1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki
B.6.1	Enhancement of Renewable Energy Sources (RES) Capacity	5,00	5,00	5,00	5,00	ΔΑ	5,00	2,00
B.6.2	Growth in the renewable energy sector	5,00	5,00	5,00	5,00	ΔΑ	5,00	3,00
B.6.3	Encouragement of the adoption of renewable energy sources	5,00	5,00	5,00	5,00	ΔΑ	5,00	5,00
B.6.4	Improvement of buildings' energy performance / Reduction of energy-intensive buildings	5,00	5,00	5,00	5,00	ΔΑ	5,00	5,00
B.6.5	Job creation	5,00	5,00	5,00	5,00	ΔΑ	5,00	5,00
B.6.6	Improvement of quality and living conditions	5,00	5,00	5,00	5,00	ΔΑ	5,00	5,00
B.6.7	Socio-economic Development of the Region	5,00	5,00	5,00	5,00	ΔΑ	5,00	5,00
B.6.8	Participation and Addressing the Needs of Large Vulnerable Population Groups	5,00	5,00	5,00	5,00	ΔΑ	5,00	5,00

		8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	**Average**
B.6.1	A Enhancement of Renewable Energy Sources (RES) Capacity	5,00	5,00	4,00	ΔΑ	4,00	3,00	**4,36**
B.6.2	Growth in the renewable energy sector	4,00	4,00	4,00	ΔΑ	4,00	3,00	**4,27**
B.6.3	Encouragement of the adoption of renewable energy sources	4,00	4,00	4,00	ΔΑ	4,00	3,00	**4,45**
B.6.4	Improvement of buildings' energy performance / Reduction of energy-intensive buildings	4,00	4,00	5,00	ΔΑ	5,00	4,00	**4,73**
B.6.5	Job creation	2,00	2,00	3,00	ΔΑ	3,00	ΔΑ	**4,00**
B.6.6	Improvement of quality and living conditions	3,00	3,00	4,00	ΔΑ	4,00	4,00	**4,36**
B.6.7	Socio-economic Development of the Region	3,00	3,00	3,00	ΔΑ	4,00	ΔΑ	**4,30**
B.6.8	Participation and Addressing the Needs of Large Vulnerable Population Groups	3,00	3,00	3,00	ΔΑ	3,00	4,00	**4,18**

C.1	**How satisfied are you with the performance of the Program's Managing Body (Centre for Renewable Energy Sources and Energy Efficiency – CRES) regarding its functions? Rating scale: 1 'Not at all', 2 'Slightly', 3 'Moderately', 4 'Very', 5 'Extremely'**

		1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki
C.1.1	Information provided at the time of the programme's call for proposals	5,00	5,00	5,00	5,00	5,00	5,00	5,00
C.1.2	Support during the preparation and submission of the application"	5,00	5,00	5,00	5,00	5,00	5,00	5,00
C.1.3	Evaluation procedures	5,00	5,00	5,00	5,00	5,00	5,00	5,00
C.1.4	Approval procedures	5,00	5,00	5,00	5,00	5,00	5,00	5,00
C.1.5	Support during the implementation of the project	5,00	5,00	5,00	5,00	5,00	5,00	5,00
C.1.6	Funding disbursement procedures	5,00	5,00	5,00	5,00	5,00	5,00	5,00

		8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	**Average**
C.1.1	Information provided at the time of the programme's call for proposals	5,00	5,00	3,00	3,00	5,00	4,00	**4,62**
C.1.2	Support during the preparation and submission of the application"	5,00	5,00	3,00	2,00	5,00	5,00	**4,62**
C.1.3	Evaluation procedures	5,00	5,00	4,00	4,00	5,00	4,00	**4,77**
C.1.4	Approval procedures	5,00	5,00	4,00	4,00	5,00	5,00	**4,85**
C.1.5	Support during the implementation of the project	5,00	5,00	5,00	4,00	5,00	5,00	**4,92**
C.1.6	Funding disbursement procedures	4,00	4,00	5,00	4,00	5,00	5,00	**4,77**

D.	Efficiency of Resource Utilisation

D.1	Was a reduction in your annual operating expenses achieved as a result of the project's implementation (with regard to the coverage of the initial – internal needs)?

S/N	Beneficiary Entity	Yes	No	Estimated Annual Amount (€)	Percentage (%)	Comments
1	Municipality of Katerini	1		459.800,00 €	166,00%	The savings exceeded initial estimates due to the significant increase in electricity prices, based on the reference price of €183.28/MWh for Greece
2	Municipality of Moschato - Tavros	1		84.924,00 €	100,00%	The project led to decreased annual operational expenditures required for addressing the entity's original internal requirements. The reduction is attributable to the implementation of energy efficiency technologies and renewable energy sources (RES), such as heat pumps, LED lighting systems, and photovoltaic installations, which nearly fully meet the energy demands of the infrastructure.
3	The School of Fine Arts	1		125.569,00 €	100,00%	
4	Municipality of East Samos	1		78.600,00 €	100,00%	
5	Agricultural University of Athens	1		115.387,00 €	ΔΑ	
6	Municipality of Farsala	1		93.969,00 €	100,00%	Yes, a reduction in the annual operating expenses related to covering the entity's initial needs has been achieved. This reduction results from energy savings and the production of energy through renewable energy sources (RES).

S/N	Beneficiary Entity	Yes	No	Estimated Annual Amount (€)	Percentage (%)	Comments
7	Aristotle University of Thessaloniki (AUTH)	1		91.407,80 €	100,00%	Based on the average energy cost of €0.11/kWh and the recorded energy savings amounting to 830.98 MWh, the resulting annual cost savings are €91,407.80. Consequently, the value of the indicator is €91,407.80 per year.
8	Municipality of Skyros	1		113.242,00 €	ΔΑ	
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1		45.602,00 €		
10	Municipality of Orestiada	1		15.000,00 €	70,00%	The amount indicated refers to the reduction achieved through the implementation of energy efficiency interventions and the integration of renewable energy systems. The percentage is calculated in relation to the annual cost of heating and electricity prior to the interventions.
11	Municipality of Kavala	ΔΑ	ΔΑ	ΔΑ	ΔΑ	ΔΑ
12	Municipality of Vari Voula Vouliagmeni	1		96.831,35 €	70,31%	
13	Municipality of Agii Anargiri - Kamaterou	1		15.000,00 €	78,90%	The implementation of the project resulted in a reduction of the Municipality's annual operating expenses related to covering its original internal needs. The estimated annual savings amount to €15,000, corresponding to a 78.9% decrease compared to the pre-project operating costs of the selected municipal buildings.
	Total			**1.335.332,15 €**		

E.	Duration and Sustainability of Interventions and Results

E.1	To what extent and in what way are the benefits/results of the implemented interventions expected to be sustained after the completion of the Programme?

A/A	Beneficiary Entity	Comments
1	Municipality of Katerini	To a significant extent. The benefits of the interventions will be sustained beyond the end of the Programme, as: • The operating costs of the facilities have been substantially reduced. • The installed equipment has a long service life. • Energy meters are in place for continuous monitoring. • Personnel have been trained to ensure proper operation and maintenance. • Citizens have been informed and sensitised regarding green technologies.
2	Municipality of Moschato - Tavros	The project benefits will persist beyond its completion, as the Moschato Indoor Gymnasium now operates as a near-zero energy consumption building, significantly reducing operational costs and CO_2 emissions. Citizens will continue utilizing the upgraded facilities, while the implemented awareness-raising initiatives have strengthened knowledge and engagement regarding green energy solutions
3	The School of Fine Arts	The project's benefits will endure beyond its completion. The building will consume less energy, resulting in reduced operational costs. The installed equipment will continue functioning and contributing to energy efficiency. Furthermore, the awareness-raising activities and dedicated laboratory will remain available for use by students and visitors, enhancing knowledge and environmental consciousness on energy and sustainability
4	Municipality of East Samos	The project benefits are expected to persist for many years because: • Permanent technical interventions were implemented, including LED lighting replacement, thermal insulation installation, heat pumps, and a Building Energy Monitoring System (BEMS), which will consistently reduce energy consumption and operational costs. • The new technologies will continue operating automatically without requiring additional resources. • Awareness-raising and training activities were conducted for citizens and municipal staff, helping maintain energy-conscious behaviors. • A dedicated website and informational material were created, which will remain publicly available in the future

A/A	Beneficiary Entity	Comments
5	Agricultural University of Athens	TThe benefits will be sustained, as the building remains in full operation throughout the entire year.
6	Municipality of Farsala	The benefits of the project are expected to continue beyond the completion of the Programme. The building will maintain its energy and cost savings as a result of the interventions carried out, while also generating clean energy through photovoltaic systems. At the same time, it will continue to serve as a venue for educational and cultural activities, maintaining its role as a model centre. The monitoring equipment will support effective energy management, and the citizens who were informed will continue to benefit from the knowledge and awareness they have gained.
7	Aristotle University of Thessaloniki (AUTH)	Regarding the exploitation of the Action's results, the implementation of interventions is expected to generate multiplier effects for users of the Aristotle University of Thessaloniki (AUTH) School of Sciences and the broader university community. The comfort and living conditions of students and academic/administrative staff will be upgraded, thereby enhancing academic and research performance. Concurrently, significant economic benefits will arise from energy savings covering the daily operational needs of the building infrastructure. The conserved resources can be reallocated to other sectors, such as implementing similar projects or research funding. Furthermore, the combination of demonstrative interventions in a high-traffic AUTH building and the installation of a photovoltaic-powered EV charging station will create a showcase space to raise awareness among students, staff, and visitors. The energy upgrade of the School of Sciences building has led to: Carbon footprint reduction, Energy conservation, Environmental protection. It serves as a demonstrative project for both building users and AUTH's academic community. The building already implements sound environmental management policies, including: Recycling bins for plastic/glass packaging, LED lighting installation. A direct comparison of performance indicators demonstrates high target achievement, as all values align with the Programme's overall objectives. Consequently, this Action contributes exceptionally to Programme goal attainment, as evidenced by the corresponding indicators
8	Municipality of Skyros	1. Equipment functionality inspection 2. Preventive and periodic on-site equipment maintenance, during hours specified each time by the Municipality 3. Equipment malfunction remediation in accordance with the manufacturer's guidelines, until full restoration to its pre-damage operational and productive condition

A/A	Beneficiary Entity	Comments
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1. Equipment functionality inspection 2. Preventive and periodic on-site equipment maintenance, during hours specified each time by the Municipality 3. Equipment malfunction remediation in accordance with the manufacturer's guidelines, until full restoration to its pre-damage operational and productive condition
10	Municipality of Orestiada	The interventions were implemented in buildings that will maintain or increase their usage frequency in the future. Consequently, the benefits/outcomes are expected to be enjoyed by new students, teachers, and visitors
11	Municipality of Kavala	ΔΑ
12	Municipality of Vari Voula Vouliagmeni	The capitalisation of the project’s results already constitutes a continuation of the implemented interventions, both in the immediate future and through the transfer of know-how to neighbouring municipalities.
13	Municipality of Agii Anargiri - Kamaterou	he project benefits will continue beyond the Programme's completion, as the implemented interventions are permanent in nature. Furthermore, the Municipality's technical team has received training to properly maintain and manage the new infrastructure, thereby ensuring the sustainability of outcomes.

E.2	What is the estimated lifecycle of the project (in years)?

S/N	Beneficiary Entity	Total Duration of the Project Lifecycle
1	Municipality of Katerini	10
2	Municipality of Moschato - Tavros	15
3	The School of Fine Arts	10
4	Municipality of East Samos	10
5	Agricultural University of Athens	15
6	Municipality of Farsala	10
7	Aristotle University of Thessaloniki (AUTH)	2[7]
8	Municipality of Skyros	17
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	17
10	Municipality of Orestiada	15
11	Municipality of Kavala	ΔΑ
12	Municipality of Vari Voula Vouliagmeni	>10
13	Municipality of Agii Anargiri - Kamaterou	1[7]

[7] The project's operational lifespan estimation appears to be incorrect

E.3	Have measures been implemented to ensure the sustainability and continued operation of your project?

S/N	Beneficiary Entity	Yes	No	Comments
1	Municipality of Katerini	1		Specific measures have been taken to ensure the sustainability and continued operation of the project. Municipal staff have received appropriate training for the operation and maintenance of the equipment. Energy consumption meters and a monitoring system have been installed. The equipment used is modern, energy-efficient, and entails low maintenance costs. Finally, the operation and maintenance of the infrastructure have been incorporated into the Municipality's annual budget, thus ensuring the continued benefit of the project beyond the duration of the Programme.
2	Municipality of Moschato - Tavros	1		Specific measures have been taken to ensure the sustainability and continued operation of the project. The Municipality of Moschato–Tavros has integrated the operation of the Indoor Gymnasium into its operational plan, ensuring regular equipment maintenance, monitoring of energy performance through the installed metering system, and coverage of operational expenses. In addition, the use of renewable energy technologies significantly reduces operating costs, thereby enhancing the long-term sustainability of the infrastructure
3	The School of Fine Arts	1		Yes, measures have been taken to ensure the continued operation of the project beyond the completion of the Programme. Regular maintenance of the equipment and infrastructure has been foreseen, while the staff of the School of Fine Arts (ASFA) has been trained to effectively utilise the installed systems. Furthermore, the experiential workshop will continue to operate as part of the School's educational activities, thereby ensuring the ongoing use and dissemination of the project's outcomes.
4	Municipality of East Samos	1		Yes, measures have been taken to ensure the continued operation of the project after the completion of the Programme. Monitoring systems have been installed, personnel have been trained, and materials and technologies requiring minimal maintenance have been used. In addition, awareness-raising activities have been carried out to promote the proper use of the infrastructure..

S/N	Beneficiary Entity	Yes	No	Comments
5	Agricultural University of Athens	1		Preventive Maintenance
6	Municipality of Farsala	1		Indeed, measures have been implemented to ensure the project's continued operation beyond the Programme's completion. Specifically: • Equipment maintenance provisions have been established; • Dedicated staff have been recruited for the building's operation; • An energy-efficient usage manual has been developed; • The building is already being utilized by cultural and educational organizations; • The reduction in energy costs contributes to the project's long-term sustainability."
7	Aristotle University of Thessaloniki (AUTH)	1		The Aristotle University of Thessaloniki (AUTH) maintains an organized Technical Service Department, which has undertaken the maintenance and technical supervision of the project. This Department ensures its continuous and proper operation in accordance with the specified technical requirements
8	Municipality of Skyros	1		Upon expiration of the first year of equipment installation and operation (covered under the supply warranty), a competitive tender procedure will be initiated in accordance with Law 4412/2016 and the relevant EU public procurement framework, for the award of a five-year operation, maintenance and repair (OMR) service contract
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1		Upon completion of the first year of equipment installation and operation (covered under the supply warranty), a tendering procedure will be launched in accordance with Law 4412 and the relevant regulatory framework for the selection of a contractor to undertake a 5-year service, maintenance and repair agreement
10	Municipality of Orestiada	1		Training has been provided to the personnel (users) of municipal buildings. Provisions have been made to ensure that each Municipality undertakes the maintenance of the equipment installed, as part of its obligations regarding the upkeep and operation of municipal buildings
11	Municipality of Kavala	ΔΑ	ΔΑ	ΔΑ

S/N	Beneficiary Entity	Yes	No	Comments
12	Municipality of Vari Voula Vouliagmeni	1		Assignment of maintenance responsibilities for the new electromechanical equipment
13	Municipality of Agii Anargiri - Kamaterou	1		Yes, measures have been taken to ensure the sustainability and continued operation of the project. The technical department of the Municipality has received specialized training for the maintenance and monitoring of the new energy infrastructure, while the operational needs of the project have been incorporated into the Municipality's annual budget. Furthermore, the installation of Building Energy Management Systems (BEMS) allows for effective monitoring and timely intervention where necessary

E.4	Please identify up to five (5) critical factors that could potentially have an adverse impact on the efficient implementation of your project in the future. What is the likelihood of occurrence for each of these factors, in your estimation? What measures have you initiated or planned in order to mitigate the potential impact of such situations?

S/N	Beneficiary Entity	Response (Factor, Likelihood of Occurrence (low, medium, high), Mitigation Measures)
1	Municipality of Katerini	1. Wear or malfunction of equipment – Medium -Municipal staff has been trained to promptly identify and resolve technical issues. A preventive maintenance schedule is in place, and a dedicated budget line has been allocated for maintenance and repairs. 2. Reduction in technical support due to staff turnover – Low - An internal team with the necessary technical expertise has been established. A complete technical file and user manuals are maintained to facilitate knowledge transfer to new personnel. External support services are also available, if required.
2	Municipality of Moschato - Tavros	1. Wear of equipment / need for maintenance of energy systems – Medium - Regular maintenance by the Municipality's technical services has been foreseen, along with continuous monitoring through smart meters. 2. Changes in the funding of the Municipality's operational expenditures – Low - The project has been integrated into the Municipality's annual budget and operational plan, ensuring financial sustainability. 3. Lack of citizen awareness or engagement with the new infrastructure – Low - Ongoing awareness-raising and outreach activities are planned to enhance public participation and foster community ownership.
3	The School of Fine Arts	1. Physical wear or technical malfunctions of equipment – Medium - A regular maintenance and technical inspection programme has been established, to be carried out by specialised personnel. 2. Limited utilisation of infrastructure due to lack of human resources or changes in the academic curriculum – Low - The use of the experiential laboratory has been integrated into the school's activities. Continuous training and awareness-raising actions are foreseen for both staff and students to ensure sustained engagement.

S/N	Beneficiary Entity	Response (Factor, Likelihood of Occurrence (low, medium, high), Mitigation Measures)
4	Municipality of East Samos	1. Lack of regular maintenance of technical systems – Medium - Municipal technical staff is being trained, and a schedule for regular inspections and maintenance has been established. 2. Equipment damage or ageing due to weather conditions or natural wear – Low - High-quality materials have been used; spare parts have been procured, and a contract with an external technical partner has been secured for support. 3. Changes in the regulatory or funding framework affecting operations – Low - Continuous monitoring of relevant legislation is in place, with readiness to promptly adapt to new requirements. 4. Limited energy awareness among infrastructure users – Low - Awareness-raising activities are being continued to promote energy-conscious behaviour among users.
5	Agricultural University of Athens	1. Age-related wear – Medium - Preventive maintenance
6	Municipality of Farsala	1. Limited participation of citizens and stakeholders in the use of the building – Low – Continuation of awareness-raising activities and strengthening of cooperation with schools, associations, and local stakeholders. 2. Wear and tear of equipment – Medium – Regular maintenance and immediate restoration through the personnel already recruited. 3. Delays or difficulties in the connection or operation of energy infrastructures – Low – Ongoing communication with the Hellenic Electricity Distribution Network Operator (HEDNO) and technical monitoring until full operational functionality of all infrastructures is achieved.
7	Aristotle University of Thessaloniki (AUTH)	1. Insufficient funding for future maintenance – Medium – Two new positions have been created within the Technical Services Department of the Aristotle University of Thessaloniki (AUTh), and the University's budget provides for the coverage of operational costs. 2. Equipment wear or failure of automation systems – Medium – A preventive maintenance programme is implemented by the Technical Services Department, with monitoring via the Building Energy Management System (BEMS). 3. Inadequate staff training – Low – AUTh personnel and students have already received training through a hands-on workshop, and follow-up training sessions are planned. 4. Reduced interest from the university community – Low – Awareness and publicity actions have been initiated to ensure ongoing engagement. 5. Changes in the institutional or regulatory framework – Low – National and European policies are monitored systematically, enabling adaptation of operational practices as needed.

S/N	Beneficiary Entity	Response (Factor, Likelihood of Occurrence (low, medium, high), Mitigation Measures)
8	Municipality of Skyros	1. Lack of spare parts – Low – Service contract for operation, maintenance, and repairs
9	Municipal Water and Sewerage Company of Drama (DEYA Drama)	1. Lack of spare parts – Low – Service contract for operation, maintenance, and repairs
10	Municipality of Orestiada	1. Inefficient energy use – Medium – User training 2. Malfunctions in electromechanical equipment – Low – Inclusion of related costs in the municipal budgets.
11	Municipality of Kavala	ΔΑ
12	Municipality of Vari Voula Vouliagmeni	1. System failures – Medium – Assignment of maintenance responsibilities. 2. Acts of vandalism – Medium – Monitoring through the Building Energy Management System (BEMS). 3. Changes in interconnection terms – High – (no mitigation measure indicated; consider including one for completeness)
13	Municipality of Agii Anargiri - Kamaterou	1. Equipment wear or damage - Medium - Regular maintenance by the Municipality's trained technical service is foreseen, with costs covered through the municipal budget, 2. Changes in the institutional/legal framework for energy management - Medium - Continuous monitoring of developments by the Municipality's administration and adaptation of practices where required. 3. Lack of specialized personnel for project management - Low - Training of the Municipality's technical staff has already been conducted, while provisions exist for knowledge retention through manuals and internal procedures.

6.3 Primary Research Data

6.3.1 Data Processing – Data Tables

6.3.1.1 Set Targets at the Project Inclusion Stage

		Beneficiary Entity													
S/N	Code, Indicator Name and Measurement Unit	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
1	EOX_O004 Number of awareness raising campaigns carried out (mumber)	1	1	1	1	1	1	1	1	1	1	1	1	1	**13,00**
2	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	1	1	1	1	1	1	1	1	1	1	1	1	1	**13,00**
3	EOX_O034 Installed capacity for production of renewable energy (in MW)	0,01	0,01	0,18	0,02	0,04	0,04	0,005	0,10	0,100	0,290	0,470	0,190	0,020	**1,48**
4	EOX_O039 Number of people reached by awareness campaigns (number)	5.600	4.041	5.250	9.000	1.400	3.709	5.250	2.988	3.130	7.854	3.213	13.200	45.000	**109.635,00**
5	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	1	1	1	1	1	2	1	1	1	3	1	7	1	**22,00**
6	EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	1	1	1	1	1	1	1	1	1	3	1	7	1	**21,00**
7	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	1	1	1	1	1	1	1	1	1	3	1	7	1	**21,00**
8	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	56	202	100	45	72	92	150	18	19	30	1.020	50	740	**2.594,00**
9	EOX_O045 Number of conferences / workshops held related to results from projects (number)	3	3	3	3	3	3	3	2	2	7	2	7	5	**46,00**

		Beneficiary Entity													
S/N	Code, Indicator Name and Measurement Unit	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
10	EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	1	1	1	1	1	1	1	1	1	1	1	1	1	**13,00**
11	EOX_R001 Number of jobs created	2	2	2	1	2	2	2	1	1	2	1	4	4	**26,00**
12	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	1.264,00	261,00	330,00	82,00	310,00	82,00	254,06	701,00	300,00	170,00	514,00	415,00	38,90	**4.721,96**
13	EOX_R037 Estimated monetary savings in EUR/year	459.800,00	84.924,00	125.569,00	78.600,00	115.387,00	93.969,00	91.407,80	69.724,00	38.758,00	67.000,00	2.668,00	70.021,00	15.000,00	**1.312.827,80**
14	EOX_R038 Estimated energy savings (in MWh/year)	4.180,00	772,00	1.141,00	714,00	1.049,00	854,00	830,98	717,00	750,00	650,00	2.705,00	1.421,00	107,60	**15.891,58**
15	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	7,00	16,00	30,00	32,00	65,00	257,00	7,30	4	10	170	456	279	32	**1.365,30**
16	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	75.000	141.456	45.000	13.500	105.466	116.325	49.980	3.006	3.300	6.854	15.000	6.540	6.450	**587.877,00**

6.3.1.2 Achievement of Objectives

		Beneficiary Entity													
S/N	Code, Indicator Name and Measurement Unit	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
1	EOX_O004 Number of awareness raising campaigns carried out (mumber)	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	**13,00**
2	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	1,00	0,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	**12,00**
3	EOX_O034 Installed capacity for production of renewable energy (in MW)	0,01	0,01	0,00	0,00	0,04	0,01	0,01	0,08	0,10	0,25	0,47	0,18	0,02	**1,18**
4	EOX_O039 Number of people reached by awareness campaigns (number)	5.600,00	4.041,00	5.250,00	9.000,00	1.400,00	3.709,00	5.250,00	2.988,00	3.500,00	7.854,00	3.213,00	13.200,00	45.000,00	**110.005,00**
5	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	3,00	1,00	7,00	1,00	**22,00**
6	EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	3,00	1,00	7,00	1,00	**21,00**
7	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	3,00	1,00	7,00	1,00	**21,00**
8	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	56,00	202,00	100,00	45,00	72,00	92,00	150,00	18,00	19,00	30,00	1.020,00	50,00	740,00	**2.594,00**
9	EOX_O045 Number of conferences / workshops held related to results from projects (number)	3,00	3,00	3,00	3,00	3,00	3,00	3,00	2,00	2,00	3,00	2,00	7,00	5,00	**42,00**
10	EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	**13,00**
11	EOX_R001 Number of jobs created	2,00	2,00	2,00	1,00	2,00	2,00	2,00	1,00	1,00	2,00	1,00	4,00	4,00	**26,00**
12	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	1.264,00	261,00	330,00	82,00	310,00	82,00	254,06	701,00	303,00	155,70	645,40	319,17	38,90	**4.746,23**
13	EOX_R037 Estimated monetary savings in EUR/year	766.110,40	84.924,00	125.569,00	78.600,00	115.387,00	93.969,00	91.407,80	113.242,00	45.602,00	67.000,00	297.555,00	96.831,35	11.836,00	**1.988.033,55**

		Beneficiary Entity													
S/N	**Code, Indicator Name and Measurement Unit**	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
14	EOX_R038 Estimated energy savings (in MWh/year)	4.180,00	772,00	1.141,00	714,00	1.049,00	854,00	830,98	717,00	751,00	708,66	2.705,00	937,45	107,60	**15.467,69**
15	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	7,00	16,00	0,00	0,00	65,00	257,00	7,30	111,00	161,00	145,50	456,00	285,90	32,00	**1.543,70**
16	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	75.000,00	141.456,00	45.000,00	13.500,00	105.466,00	116.325,00	49.980,00	3.006,00	3.300,00	6.854,00	15.000,00	6.550,00	6.450,00	**587.887,00**

6.3.1.3 Project Efficiency Indicators

		Beneficiary Entity													
S/N	**Code, Indicator Name and Measurement Unit**	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
1	EOX_O004 Number of awareness raising campaigns carried out (mumber)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
2	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	100,00%	0,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	92,31%
3	EOX_O034 Installed capacity for production of renewable energy (in MW)	100,00%	100,00%	0,00%	0,00%	100,00%	25,00%	100,00%	80,00%	100,00%	86,21%	100,00%	95,26%	100,00%	79,73%
4	EOX_O039 Number of people reached by awareness campaigns (number)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	111,82%	100,00%	100,00%	100,00%	100,00%	100,34%
5	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
6	EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
7	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
8	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
9	EOX_O045 Number of conferences / workshops held related to results from projects (number)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	42,86%	100,00%	100,00%	100,00%	91,30%
10	EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
11	EOX_R001 Number of jobs created	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

		Beneficiary Entity													
S/N	**Code, Indicator Name and Measurement Unit**	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
12	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	101,00%	91,59%	125,56%	76,91%	100,00%	100,51%
13	EOX_R037 Estimated monetary savings in EUR/year	166,62%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	162,41%	117,66%	100,00%	11152,74%	138,29%	78,91%	151,43%
14	EOX_R038 Estimated energy savings (in MWh/year)	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,13%	109,02%	100,00%	65,97%	100,00%	97,33%
15	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	100,00%	100,00%	0,00%	0,00%	100,00%	100,00%	100,00%	2775,00%	1610,00%	85,59%	100,00%	102,47%	100,00%	113,07%
16	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,15%	100,00%	100,00%

6.3.1.4 Project Contribution to Achieved Outputs

		Beneficiary Entity													
S/N	Code, Indicator Name and Measurement Unit	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
1	EOX_O004 Number of awareness raising campaigns carried out (mumber)	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	100,00%
2	EOX_O012 Number of projects involving cooperation with a donor project partner (number)	8,33%	0,00%	8,33%	8,33%	8,33%	8,33%	8,33%	8,33%	8,33%	8,33%	8,33%	8,33%	8,33%	100,00%
3	EOX_O034 Installed capacity for production of renewable energy (in MW)	0,85%	0,85%	0,00%	0,00%	3,40%	0,85%	0,43%	6,80%	8,50%	21,26%	39,97%	15,39%	1,70%	100,00%
4	EOX_O039 Number of people reached by awareness campaigns (number)	5,09%	3,67%	4,77%	8,18%	1,27%	3,37%	4,77%	2,72%	3,18%	7,14%	2,92%	12,00%	40,91%	100,00%
5	EOX_O041 Number of public entities supported to apply EE/RE technologies/processes/solutions (number)	4,55%	4,55%	4,55%	4,55%	4,55%	9,09%	4,55%	4,55%	4,55%	13,64%	4,55%	31,82%	4,55%	100,00%
6	EOX_O042 Number of implemented projects with innovative EE/RE technologies/processes/solutions applied (number)	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	14,29%	4,76%	33,33%	4,76%	100,00%
7	EOX_O043 Number of implemented projects with systems for monitoring of energy consumption (number)	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	4,76%	14,29%	4,76%	33,33%	4,76%	100,00%
8	EOX_O044 Number of people trained in energy efficiency and renewable energy [number]	2,16%	7,79%	3,86%	1,73%	2,78%	3,55%	5,78%	0,69%	0,73%	1,16%	39,32%	1,93%	28,53%	100,00%
9	EOX_O045 Number of conferences / workshops held related to results from projects (number)	7,14%	7,14%	7,14%	7,14%	7,14%	7,14%	7,14%	4,76%	4,76%	7,14%	4,76%	16,67%	11,90%	100,00%
10	EOX_O046 Guidance document developed for Energy Efficiency Buildings and Infrastructures [Yes (1) / No (0)]	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	100,00%
11	EOX_R001 Number of jobs created	7,69%	7,69%	7,69%	3,85%	7,69%	7,69%	7,69%	3,85%	3,85%	7,69%	3,85%	15,38%	15,38%	100,00%
12	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	26,63%	5,50%	6,95%	1,73%	6,53%	1,73%	5,35%	14,77%	6,38%	3,28%	13,60%	6,72%	0,82%	100,00%
13	EOX_R037 Estimated monetary savings in EUR/year	38,54%	4,27%	6,32%	3,95%	5,80%	4,73%	4,60%	5,70%	2,29%	3,37%	14,97%	4,87%	0,60%	100,00%

		Beneficiary Entity													
S/N	**Code, Indicator Name and Measurement Unit**	1. Municipality of Katerini	2. Municipality of Moschato - Tavros	3. The School of Fine Arts	4. Municipality of East Samos	5. Agricultural University of Athens	6. Municipality of Farsala	7. Aristotle University of Thessaloniki	8. Municipality of Skyros	9. DEYA Drama	10. Municipality of Orestiada	11. Municipality of Kavala	12. Municipality of Vari Voula Vouliagmeni	13. Municipality of Agii Anargiri - Kamaterou	Entire programme
14	EOX_R038 Estimated energy savings (in MWh/year)	27,02%	4,99%	7,38%	4,62%	6,78%	5,52%	5,37%	4,64%	4,86%	4,58%	17,49%	6,06%	0,70%	100,00%
15	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	0,45%	1,04%	0,00%	0,00%	4,21%	16,65%	0,47%	7,19%	10,43%	9,43%	29,54%	18,52%	2,07%	100,00%
16	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure	12,76%	24,06%	7,65%	2,30%	17,94%	19,79%	8,50%	0,51%	0,56%	1,17%	2,55%	1,11%	1,10%	100,00%

6.3.1.5 Weighting of Outcome Indicators Based on the Relative Significance of Projects in the Achieved Outputs of the Programme

Beneficiary Entity	A Effectiveness of Indicator EOX_R001 – Number of Jobs Created	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	100,00%	7,69%	7,69%
2. Municipality of Moschato - Tavros	100,00%	7,69%	7,69%
3. The School of Fine Arts	100,00%	7,69%	7,69%
4. Municipality of East Samos	100,00%	3,85%	3,85%
5. Agricultural University of Athens	100,00%	7,69%	7,69%
6. Municipality of Farsala	100,00%	7,69%	7,69%
7. Aristotle University of Thessaloniki (AUTH)	100,00%	7,69%	7,69%
8. Municipality of Skyros	100,00%	3,85%	3,85%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,00%	3,85%	3,85%
10. Municipality of Orestiada	100,00%	7,69%	7,69%
11. Municipality of Kavala	100,00%	3,85%	3,85%
12. Municipality of Vari Voula Vouliagmeni	100,00%	15,38%	15,38%
13. Municipality of Agii Anargiri - Kamaterou	100,00%	15,38%	15,38%
Weighted Programme Effectiveness Indicator	100,00%	100,00%	**100,00%**

Beneficiary Entity	Effectiveness of Indicator EOX_R010 – Estimated Annual CO_2 Emissions Reduction (in tonnes)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	100,00%	26,63%	26,63%
2. Municipality of Moschato - Tavros	100,00%	5,50%	5,50%
3. The School of Fine Arts	100,00%	6,95%	6,95%
4. Municipality of East Samos	100,00%	1,73%	1,73%
5. Agricultural University of Athens	100,00%	6,53%	6,53%
6. Municipality of Farsala	100,00%	1,73%	1,73%
7. Aristotle University of Thessaloniki (AUTH)	100,00%	5,35%	5,35%
8. Municipality of Skyros	100,00%	14,77%	14,77%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	101,00%	6,38%	6,45%
10. Municipality of Orestiada	91,59%	3,28%	3,00%
11. Municipality of Kavala	125,56%	13,60%	17,07%
12. Municipality of Vari Voula Vouliagmeni	76,91%	6,72%	5,17%
13. Municipality of Agii Anargiri - Kamaterou	100,00%	0,82%	0,82%
Weighted Programme Effectiveness Indicator	100,51%	100,00%	**101,71%**

Beneficiary Entity	Effectiveness of Indicator EOX_R037 – Estimated Cost Savings (€/year)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	166,62%	38,54%	64,21%
2. Municipality of Moschato - Tavros	100,00%	4,27%	4,27%
3. The School of Fine Arts	100,00%	6,32%	6,32%
4. Municipality of East Samos	100,00%	3,95%	3,95%
5. Agricultural University of Athens	100,00%	5,80%	5,80%
6. Municipality of Farsala	100,00%	4,73%	4,73%
7. Aristotle University of Thessaloniki (AUTH)	100,00%	4,60%	4,60%
8. Municipality of Skyros	162,41%	5,70%	9,25%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	117,66%	2,29%	2,70%
10. Municipality of Orestiada	100,00%	3,37%	3,37%
11. Municipality of Kavala	11152,74%	14,97%	1669,26%
12. Municipality of Vari Voula Vouliagmeni	138,29%	4,87%	6,74%
13. Municipality of Agii Anargiri - Kamaterou	78,91%	0,60%	0,47%
Weighted Programme Effectiveness Indicator	151,43%	100,00%	**1.785,67%**

Beneficiary Entity	Effectiveness of Indicator EOX_R038 – Estimated Energy Savings (in MWh/year)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	100,00%	27,02%	27,02%
2. Municipality of Moschato - Tavros	100,00%	4,99%	4,99%
3. The School of Fine Arts	100,00%	7,38%	7,38%
4. Municipality of East Samos	100,00%	4,62%	4,62%
5. Agricultural University of Athens	100,00%	6,78%	6,78%
6. Municipality of Farsala	100,00%	5,52%	5,52%
7. Aristotle University of Thessaloniki (AUTH)	100,00%	5,37%	5,37%
8. Municipality of Skyros	100,00%	4,64%	4,64%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,13%	4,86%	4,86%
10. Municipality of Orestiada	109,02%	4,58%	5,00%
11. Municipality of Kavala	100,00%	17,49%	17,49%
12. Municipality of Vari Voula Vouliagmeni	65,97%	6,06%	4,00%
13. Municipality of Agii Anargiri - Kamaterou	100,00%	0,70%	0,70%
Weighted Programme Effectiveness Indicator	97,33%	100,00%	**98,36%**

Beneficiary Entity	Effectiveness of Indicator EOX_R039 – Estimated Increase in Renewable Energy Production (in MWh/year)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	100,00%	0,45%	0,45%
2. Municipality of Moschato - Tavros	100,00%	1,04%	1,04%
3. The School of Fine Arts	0,00%	0,00%	0,00%
4. Municipality of East Samos	0,00%	0,00%	0,00%
5. Agricultural University of Athens	100,00%	4,21%	4,21%
6. Municipality of Farsala	100,00%	16,65%	16,65%
7. Aristotle University of Thessaloniki (AUTH)	100,00%	0,47%	0,47%
8. Municipality of Skyros	2775,00%	7,19%	199,54%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	1610,00%	10,43%	167,91%
10. Municipality of Orestiada	85,59%	9,43%	8,07%
11. Municipality of Kavala	100,00%	29,54%	29,54%
12. Municipality of Vari Voula Vouliagmeni	102,47%	18,52%	18,98%
13. Municipality of Agii Anargiri - Kamaterou	100,00%	2,07%	2,07%
Weighted Programme Effectiveness Indicator	113,07%	100,00%	**448,93%**

Beneficiary Entity	Effectiveness of Indicator EOX_R041 – Number of individuals reporting that they have benefited from the improvement of public social infrastructure	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	100,00%	12,76%	12,76%
2. Municipality of Moschato - Tavros	100,00%	24,06%	24,06%
3. The School of Fine Arts	100,00%	7,65%	7,65%
4. Municipality of East Samos	100,00%	2,30%	2,30%
5. Agricultural University of Athens	100,00%	17,94%	17,94%
6. Municipality of Farsala	100,00%	19,79%	19,79%
7. Aristotle University of Thessaloniki (AUTH)	100,00%	8,50%	8,50%
8. Municipality of Skyros	100,00%	0,51%	0,51%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,00%	0,56%	0,56%
10. Municipality of Orestiada	100,00%	1,17%	1,17%
11. Municipality of Kavala	100,00%	2,55%	2,55%
12. Municipality of Vari Voula Vouliagmeni	100,15%	1,11%	1,12%
13. Municipality of Agii Anargiri - Kamaterou	100,00%	1,10%	1,10%
Weighted Programme Effectiveness Indicator	100,00%	100,00%	**100,00%**

6.3.1.6 Weighting of Outcome Indicators Based on the Financial Weight of Each Project

Beneficiary Entity	Financial Weighting Coefficient	Project Effectiveness Indicators					
		EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
1. Municipality of Katerini	6,70%	100,00%	100,00%	166,62%	100,00%	100,00%	100,00%
2. Municipality of Moschato - Tavros	5,62%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
3. The School of Fine Arts	6,93%	100,00%	100,00%	100,00%	100,00%	0,00%	100,00%
4. Municipality of East Samos	5,27%	100,00%	100,00%	100,00%	100,00%	0,00%	100,00%
5. Agricultural University of Athens	7,61%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
6. Municipality of Farsala	5,22%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
7. Aristotle University of Thessaloniki (AUTH)	7,92%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
8. Municipality of Skyros	9,37%	100,00%	100,00%	162,41%	100,00%	2775,00%	100,00%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	9,80%	100,00%	101,00%	117,66%	100,13%	1610,00%	100,00%
10. Municipality of Orestiada	8,36%	100,00%	91,59%	100,00%	109,02%	85,59%	100,00%
11. Municipality of Kavala	8,36%	100,00%	125,56%	11152,74%	100,00%	100,00%	100,00%
12. Municipality of Vari Voula Vouliagmeni	9,05%	100,00%	76,91%	138,29%	65,97%	102,47%	100,15%
13. Municipality of Agii Anargiri - Kamaterou	9,79%	100,00%	100,00%	78,91%	100,00%	100,00%	100,00%
Total for the Programme	**100,00%**	**100,00%**	**100,51%**	**151,43%**	**97,33%**	**113,07%**	**100,00%**

Beneficiary Entity	Weighted Indicator Effectiveness Based on Financial Weighting					
	EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
1. Municipality of Katerini	6,70%	6,70%	11,16%	6,70%	6,70%	6,70%
2. Municipality of Moschato - Tavros	5,62%	5,62%	5,62%	5,62%	5,62%	5,62%
3. The School of Fine Arts	6,93%	6,93%	6,93%	6,93%	0,00%	6,93%
4. Municipality of East Samos	5,27%	5,27%	5,27%	5,27%	0,00%	5,27%
5. Agricultural University of Athens	7,61%	7,61%	7,61%	7,61%	7,61%	7,61%
6. Municipality of Farsala	5,22%	5,22%	5,22%	5,22%	5,22%	5,22%
7. Aristotle University of Thessaloniki (AUTH)	7,92%	7,92%	7,92%	7,92%	7,92%	7,92%
8. Municipality of Skyros	9,37%	9,37%	15,22%	9,37%	260,12%	9,37%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	9,80%	9,89%	11,53%	9,81%	157,71%	9,80%
10. Municipality of Orestiada	8,36%	7,66%	8,36%	9,11%	7,15%	8,36%
11. Municipality of Kavala	8,36%	10,50%	932,92%	8,36%	8,36%	8,36%
12. Municipality of Vari Voula Vouliagmeni	9,05%	6,96%	12,52%	5,97%	9,28%	9,07%
13. Municipality of Agii Anargiri - Kamaterou	9,79%	9,79%	7,73%	9,79%	9,79%	9,79%
Weighted Programme Effectiveness Indicator	100,00%	99,44%	1038,00%	97,69%	485,48%	100,01%

6.3.1.7 Project Efficiency Indicators

Beneficiary Entity	Project / Programme Efficiency Indicators					
	EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
1. Municipality of Katerini	108,72%	108,72%	181,16%	108,72%	108,72%	108,72%
2. Municipality of Moschato - Tavros	112,13%	112,13%	112,13%	112,13%	112,13%	112,13%
3. The School of Fine Arts	138,71%	138,71%	138,71%	138,71%	0,00%	138,71%
4. Municipality of East Samos	107,86%	107,86%	107,86%	107,86%	0,00%	107,86%
5. Agricultural University of Athens	104,17%	104,17%	104,17%	104,17%	104,17%	104,17%
6. Municipality of Farsala	140,73%	140,73%	140,73%	140,73%	140,73%	140,73%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	103,28%	103,28%	103,28%	103,28%	103,28%
8. Municipality of Skyros	100,11%	100,11%	162,60%	100,11%	2778,18%	100,11%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,35%	101,35%	118,07%	100,48%	1615,61%	100,35%
10. Municipality of Orestiada	117,98%	108,06%	117,98%	128,63%	100,98%	117,98%
11. Municipality of Kavala	117,86%	148,00%	13145,06%	117,86%	117,86%	117,86%
12. Municipality of Vari Voula Vouliagmeni	108,69%	83,59%	150,31%	71,71%	111,38%	108,86%
13. Municipality of Agii Anargiri - Kamaterou	100,72%	100,72%	79,48%	100,72%	100,72%	100,72%
Programme Efficiency Indicator	**110,96%**	**111,53%**	**168,03%**	**108,00%**	**125,46%**	**110,97%**

6.3.1.8 Weighting of Efficiency Indicators Based on the Significance of Projects in the Programme's Achieved Outputs

Beneficiary Entity	Effectiveness of Indicator EOX_R001 – Number of Jobs Created	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	108,72%	7,69%	8,36%
2. Municipality of Moschato - Tavros	112,13%	7,69%	8,63%
3. The School of Fine Arts	138,71%	7,69%	10,67%
4. Municipality of East Samos	107,86%	3,85%	4,15%
5. Agricultural University of Athens	104,17%	7,69%	8,01%
6. Municipality of Farsala	140,73%	7,69%	10,83%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	7,69%	7,94%
8. Municipality of Skyros	100,11%	3,85%	3,85%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,35%	3,85%	3,86%
10. Municipality of Orestiada	117,98%	7,69%	9,08%
11. Municipality of Kavala	117,86%	3,85%	4,53%
12. Municipality of Vari Voula Vouliagmeni	108,69%	15,38%	16,72%
13. Municipality of Agii Anargiri - Kamaterou	100,72%	15,38%	15,50%
Programme Effectiveness Indicator	110,96%	100,00%	**112,13%**

Beneficiary Entity	Effectiveness of Indicator EOX_R010 – Estimated Annual CO2 Emissions Reduction (in tonnes)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	108,72%	26,63%	28,96%
2. Municipality of Moschato - Tavros	112,13%	5,50%	6,17%
3. The School of Fine Arts	138,71%	6,95%	9,64%
4. Municipality of East Samos	107,86%	1,73%	1,86%
5. Agricultural University of Athens	104,17%	6,53%	6,80%
6. Municipality of Farsala	140,73%	1,73%	2,43%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	5,35%	5,53%
8. Municipality of Skyros	100,11%	14,77%	14,79%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	101,35%	6,38%	6,47%
10. Municipality of Orestiada	108,06%	3,28%	3,54%
11. Municipality of Kavala	148,00%	13,60%	20,12%
12. Municipality of Vari Voula Vouliagmeni	83,59%	6,72%	5,62%
13. Municipality of Agii Anargiri - Kamaterou	100,72%	0,82%	0,83%
Programme Efficiency Indicator	111,53%	100,00%	**112,77%**

Beneficiary Entity	Effectiveness of Indicator EOX_R037 – Estimated Cost Savings (€/year)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	181,16%	38,54%	69,81%
2. Municipality of Moschato - Tavros	112,13%	4,27%	4,79%
3. The School of Fine Arts	138,71%	6,32%	8,76%
4. Municipality of East Samos	107,86%	3,95%	4,26%
5. Agricultural University of Athens	104,17%	5,80%	6,05%
6. Municipality of Farsala	140,73%	4,73%	6,65%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	4,60%	4,75%
8. Municipality of Skyros	162,60%	5,70%	9,26%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	118,07%	2,29%	2,71%
10. Municipality of Orestiada	117,98%	3,37%	3,98%
11. Municipality of Kavala	13145,06%	14,97%	1967,46%
12. Municipality of Vari Voula Vouliagmeni	150,31%	4,87%	7,32%
13. Municipality of Agii Anargiri - Kamaterou	79,48%	0,60%	0,47%
Programme Efficiency Indicator	168,03%	100,00%	**2096,27%**

Beneficiary Entity	Effectiveness of Indicator EOX_R038 – Estimated Energy Savings (in MWh/year)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	108,72%	27,02%	29,38%
2. Municipality of Moschato - Tavros	112,13%	4,99%	5,60%
3. The School of Fine Arts	138,71%	7,38%	10,23%
4. Municipality of East Samos	107,86%	4,62%	4,98%
5. Agricultural University of Athens	104,17%	6,78%	7,06%
6. Municipality of Farsala	140,73%	5,52%	7,77%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	5,37%	5,55%
8. Municipality of Skyros	100,11%	4,64%	4,64%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,48%	4,86%	4,88%
10. Municipality of Orestiada	128,63%	4,58%	5,89%
11. Municipality of Kavala	117,86%	17,49%	20,61%
12. Municipality of Vari Voula Vouliagmeni	71,71%	6,06%	4,35%
13. Municipality of Agii Anargiri - Kamaterou	100,72%	0,70%	0,70%
Programme Efficiency Indicator	108,00%	100,00%	**111,64%**

Beneficiary Entity	Effectiveness of Indicator EOX_R039 – Estimated Increase in Renewable Energy Production (in MWh/year)	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	108,72%	0,45%	0,49%
2. Municipality of Moschato - Tavros	112,13%	1,04%	1,16%
3. The School of Fine Arts	0,00%	0,00%	0,00%
4. Municipality of East Samos	0,00%	0,00%	0,00%
5. Agricultural University of Athens	104,17%	4,21%	4,39%
6. Municipality of Farsala	140,73%	16,65%	23,43%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	0,47%	0,49%
8. Municipality of Skyros	2778,18%	7,19%	199,77%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	1615,61%	10,43%	168,50%
10. Municipality of Orestiada	100,98%	9,43%	9,52%
11. Municipality of Kavala	117,86%	29,54%	34,82%
12. Municipality of Vari Voula Vouliagmeni	111,38%	18,52%	20,63%
13. Municipality of Agii Anargiri - Kamaterou	100,72%	2,07%	2,09%
Programme Efficiency Indicator	125,46%	100,00%	**465,27%**

Beneficiary Entity	Effectiveness of Indicator EOX_R041 – Number of Individuals Reporting Benefits from the Improvement of Public Social Infrastructure	Weight in the Achieved Outputs of the Indicator	Weighted Effectiveness of the Indicator
1. Municipality of Katerini	108,72%	12,76%	13,87%
2. Municipality of Moschato - Tavros	112,13%	24,06%	26,98%
3. The School of Fine Arts	138,71%	7,65%	10,62%
4. Municipality of East Samos	107,86%	2,30%	2,48%
5. Agricultural University of Athens	104,17%	17,94%	18,69%
6. Municipality of Farsala	140,73%	19,79%	27,85%
7. Aristotle University of Thessaloniki (AUTH)	103,28%	8,50%	8,78%
8. Municipality of Skyros	100,11%	0,51%	0,51%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	100,35%	0,56%	0,56%
10. Municipality of Orestiada	117,98%	1,17%	1,38%
11. Municipality of Kavala	117,86%	2,55%	3,01%
12. Municipality of Vari Voula Vouliagmeni	108,86%	1,11%	1,21%
13. Municipality of Agii Anargiri - Kamaterou	100,72%	1,10%	1,11%
Programme Efficiency Indicator	110,97%	100,00%	**117,04%**

6.3.1.9 Weighting of Efficiency Indicators Based on Each Project's Financial Weight

Beneficiary Entity	Financial Weighting Coefficient	Project Efficiency Indicators					
		EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
1. Municipality of Katerini	6,70%	108,72%	108,72%	181,16%	108,72%	108,72%	108,72%
2. Municipality of Moschato - Tavros	5,62%	112,13%	112,13%	112,13%	112,13%	112,13%	112,13%
3. The School of Fine Arts	6,93%	138,71%	138,71%	138,71%	138,71%	0,00%	138,71%
4. Municipality of East Samos	5,27%	107,86%	107,86%	107,86%	107,86%	0,00%	107,86%
5. Agricultural University of Athens	7,61%	104,17%	104,17%	104,17%	104,17%	104,17%	104,17%
6. Municipality of Farsala	5,22%	140,73%	140,73%	140,73%	140,73%	140,73%	140,73%
7. Aristotle University of Thessaloniki (AUTH)	7,92%	103,28%	103,28%	103,28%	103,28%	103,28%	103,28%
8. Municipality of Skyros	9,37%	100,11%	100,11%	162,60%	100,11%	2778,18%	100,11%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	9,80%	100,35%	101,35%	118,07%	100,48%	1615,61%	100,35%
10. Municipality of Orestiada	8,36%	117,98%	108,06%	117,98%	128,63%	100,98%	117,98%
11. Municipality of Kavala	8,36%	117,86%	148,00%	13145,06%	117,86%	117,86%	117,86%
12. Municipality of Vari Voula Vouliagmeni	9,05%	108,69%	83,59%	150,31%	71,71%	111,38%	108,86%
13. Municipality of Agii Anargiri - Kamaterou	9,79%	100,72%	100,72%	79,48%	100,72%	100,72%	100,72%
Total for the Programme	100,00%	110,96%	111,53%	168,03%	108,00%	125,46%	110,97%

Beneficiary Entity	Indicator's Weighted Efficiency					
	EOX_R001 Number of jobs created	EOX_R010 Estimated annual CO2-emissions reductions (in tonnes)	EOX_R037 Estimated monetary savings in EUR/year	EOX_R038 Estimated energy savings (in MWh/year)	EOX_R039 Estimated increase in renewable energy production (in MWh/year)	EOX_R041 Number of people who declare that they benefited from improved public social infrastructure
1. Municipality of Katerini	7,28%	7,28%	12,13%	7,28%	7,28%	7,28%
2. Municipality of Moschato - Tavros	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%
3. The School of Fine Arts	9,61%	9,61%	9,61%	9,61%	0,00%	9,61%
4. Municipality of East Samos	5,69%	5,69%	5,69%	5,69%	0,00%	5,69%
5. Agricultural University of Athens	7,92%	7,92%	7,92%	7,92%	7,92%	7,92%
6. Municipality of Farsala	7,35%	7,35%	7,35%	7,35%	7,35%	7,35%
7. Aristotle University of Thessaloniki (AUTH)	8,18%	8,18%	8,18%	8,18%	8,18%	8,18%
8. Municipality of Skyros	9,38%	9,38%	15,24%	9,38%	260,41%	9,38%
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	9,83%	9,93%	11,57%	9,84%	158,26%	9,83%
10. Municipality of Orestiada	9,86%	9,03%	9,86%	10,75%	8,44%	9,86%
11. Municipality of Kavala	9,86%	12,38%	1099,58%	9,86%	9,86%	9,86%
12. Municipality of Vari Voula Vouliagmeni	9,84%	7,57%	13,61%	6,49%	10,08%	9,85%
13. Municipality of Agii Anargiri - Kamaterou	9,86%	9,86%	7,78%	9,86%	9,86%	9,86%
Programme Efficiency Indicator	110,96%	110,48%	1214,81%	108,52%	493,96%	110,98%

6.3.1.10 Unit Costs for CO_2 Emission Reduction, Energy Savings and Increased Renewable Energy Production

Beneficiary Entity	Eligible Public Expenditure (A)	Project Lifetime (as declared by the beneficiaries) (B)	Result Indicators Contributing to the Objectives of the National Energy and Climate Plan (NECP)			Unit Costs		
			EOX_R010 Estimated annual CO2-emissions reductions (in tonnes) (C)	EOX_R038 Estimated energy savings (in MWh/year) (D)	EOX_R039 Estimated increase in renewable energy production (σε MWh/έτος) (E)	€/ tn CO_2 (F)=(A)/[(B)x(C)]	Energy Savings (€/MWh) (G)=(A)/[(B)x(D)]	Increase in Renewable Energy Production €/MWh) (H)=(A)/[(B)x(E)]
1. Municipality of Katerini	882.642,08 €	10,00	1.264,00 €	4.180,00 €	7,00 €	69,83	21,12 €	12.609,17 €
2. Municipality of Moschato - Tavros	741.341,68 €	15,00	261,00 €	772,00 €	16,00 €	189,36	64,02 €	3.088,92 €
3. The School of Fine Arts	912.869,58 €	10,00	330,00 €	1.141,00 €	0,00 €	276,63	80,01 €	
4. Municipality of East Samos	694.969,24 €	10,00	82,00 €	714,00 €	0,00 €	847,52	97,33 €	
5. Agricultural University of Athens	1.002.568,30 €	15,00	310,00 €	1.049,00 €	65,00 €	215,61	63,72 €	1.028,28 €
6. Municipality of Farsala	688.161,79 €	10,00	82,00 €	854,00 €	257,00 €	839,22	80,58 €	267,77 €
7. Aristotle University of Thessaloniki (AUTH)	1.043.993,86 €	10,00	254,06 €	830,98 €	7,30 €	410,92	125,63 €	14.301,29 €
8. Municipality of Skyros	1.235.611,66 €	17,00	701,00 €	717,00 €	111,00 €	103,68	101,37 €	654,80 €
9. Municipal Water and Sewerage Company of Drama (DEYA Drama)	1.291.274,01 €	17,00	303,00 €	751,00 €	161,00 €	250,68	101,14 €	471,78 €
10. Municipality of Orestiada	1.101.851,49 €	15,00	155,70 €	708,66 €	145,50 €	471,78	103,66 €	504,86 €
11. Municipality of Kavala	1.102.658,85 €	10,00	645,40 €	2.705,00 €	456,00 €	170,85	40,76 €	241,81 €
12. Municipality of Vari Voula Vouliagmeni	1.193.247,18 €	10,00	319,17 €	937,45 €	285,90 €	373,86	127,29 €	417,37 €
13. Municipality of Agii Anargiri - Kamaterou	1.290.695,93 €	10,00	38,90 €	107,60 €	32,00 €	3.317,98	1.199,53 €	4.033,42 €
Total Programme	**13.181.885,65 €**	**12,23 (μέσος όρος)**	**4.746,23 €**	**15.467,69 €**	**1.543,70 €**	**227,08**	**69,68 €**	**698,17 €**